

H.R. 1787, CONSERVATION OF ASIAN ELEPHANTS

HEARING

BEFORE THE

SUBCOMMITTEE ON FISHERIES CONSERVATION,
WILDLIFE AND OCEANS

OF THE

COMMITTEE ON RESOURCES
HOUSE OF REPRESENTATIVES

ONE HUNDRED FIFTH CONGRESS

FIRST SESSION

ON

H.R. 1787

TO ASSIST IN THE CONSERVATION OF ASIAN ELEPHANTS BY SUPPORTING AND PROVIDING FINANCIAL RESOURCES FOR THE CONSERVATION PROGRAMS OF NATIONS WITHIN THE RANGE OF ASIAN ELEPHANTS AND PROJECTS OF PERSONS WITH DEMONSTRATED EXPERTISE IN THE CONSERVATION OF ASIAN ELEPHANTS

JULY 31, 1997, WASHINGTON, DC

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CONTENTS

	Page
Hearing held July 31, 1997	1
Statement of Members:	
Abercrombie, Hon. Neil, a Representative in Congress from the State of Hawaii	2
Farr, Hon. Sam, a Representative in Congress from the State of Cali- fornia	4
Miller, Hon. George, a Representative in Congress from the State of California, prepared statement of	2
Saxton, Hon. Jim, a Representative in Congress from the State of New Jersey	1
Prepared statement of	2
Young, Hon. Don, a Representative in Congress from the State of Alaska, prepared statement of	4
Statement of Witnesses:	
Dinerstein, Dr. Eric, Chief Scientist and Director, Conservation Science Program, World Wildlife Fund	16
Prepared statement of	55
Ireland, Andy, Senior Vice President, Feld Entertainment, Inc.,	26
Prepared statement of	73
Jones, Marshall P., Assistant Director for International Affairs, United States Fish and Wildlife Service; accompanied by David Ferguson, Chief, Branch of Middle East, South Asia, and South African Inter- national Affairs, United States Fish and Wildlife Service	5
Prepared statement of	34
Maple, Dr. Terry, President/CEO, Zoo Atlanta	13
Prepared statement of	36
Pearl, Dr. Mary, Executive Director, Wildlife Preservation Trust Inter- national	25
Prepared statement of	39
Stüwe, Dr. Michael, Research Associate, Conservation and Research Cen- ter, Smithsonian Institute	23
Prepared statement of	64
Sukumar, Dr. Raman, Chairman, IUCN/SSC Asian Elephant Specialist Group	14
Prepared statement of	37
Additional material supplied:	
Johnsingh, Dr. A.J.T., and A. Christy Williams, Wildlife Institute of India, prepared statement of	79
Memorandum	50
Text of H.R. 1787	41

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PERSONS WITH DEMONSTRATED EXPER-
TISE IN THE CONSERVATION OF ASIAN ELE-
PHANTS**

THURSDAY, JULY 31, 1997

HOUSE OF REPRESENTATIVES, SUBCOMMITTEE ON FISH-
ERIES CONSERVATION, WILDLIFE AND OCEANS, COM-
MITTEE ON RESOURCES, *Washington, DC.*

The Subcommittee met, pursuant to notice, at 10:08 a.m., in room 1334, Longworth House Office Building, Hon. Jim Saxton (chairman of the Subcommittee) presiding.

**STATEMENT OF HON. JIM SAXTON, A REPRESENTATIVE IN
CONGRESS FROM THE STATE OF NEW JERSEY**

Mr. SAXTON. Good morning. The Subcommittee will come to order. The purpose of today's hearing is to discuss H.R. 1787, the Asian Elephant Conservation Act of 1997, which Mr. Abercrombie and I and 17 other members have introduced on June 4, 1997.

The fundamental purposes of this legislation are twofold: one, to create an Asian Elephant Conservation Fund, and, two, to authorize the Congress to appropriate up to \$5 million per year to this fund to finance various conservation projects for each of the next five fiscal years.

This legislation is modeled after the highly successful African Elephant Conservation Act of 1988 and the Rhinoceros and Tiger Conservation Act of 1994. The new authorization would be separate from those funds appropriated for African elephants, rhinos, and tigers.

Under the terms of H.R. 1787, the Secretary of Interior would carefully evaluate the merits of each proposed conservation project, select those that best enhance the future of the Asian elephant, and give priority to those projects whose sponsors demonstrate the ability to match some portion of the Federal funds.

In addition, the bill stipulates that the Secretary may accept donations to assist Asian elephants and shall spend no more than 3 percent of the amount appropriated to administer the fund.

Unless immediate steps are taken to conserve this magnificent animal, it will surely continue to disappear from much, if not most, of its traditional habitat. We cannot allow the Asian elephant, which has such a direct impact on so many other species, to become extinct.

The goal of H.R. 1787 is to stop the decline and hopefully rebuild the population stocks of this irreplaceable species by financing with a small amount of Federal money a limited number of conservation projects. I look forward to hearing from our witnesses. And at this time, let me turn to the Ranking Member, Mr. Abercrombie.

[Statement of Mr. Saxton follows:]

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I look forward to hearing from our witnesses, some of whom have traveled great distances to be here today.

[H.R. 1787 may be found at end of hearing.]

[Memorandum may be found at end of hearing.]

STATEMENT OF HON. NEIL ABERCROMBIE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF HAWAII

Mr. ABERCROMBIE. Thank you very much, Mr. Chairman. I have a statement from the ranking member, Mr. Miller, which I would like permission to submit for the record at this point.

Mr. SAXTON. Without objection.

[Statement of Mr. Miller follows:]

STATEMENT OF HON. GEORGE MILLER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

I would like to thank Mr. Saxton and Mr. Abercrombie for taking the initiative in sponsoring H.R. 1787, the Asian Elephant Conservation Act of 1997, and in holding this hearing. I am sure we will hear testimony about the threatened status of Asian elephants throughout Asia, and how this legislation can play an important role in the protection of this species.

The need for legislation such as the Asian Elephant Conservation Act of 1997 has greatly increased due to the recent decision by the Convention on International Trade in Endangered Species of Flora and Fauna (CITES) to down list several popu-

lations of African elephants as well as to allow a one-time ivory sale in the near future. Many countries, including many in Africa and Asia that still harbor populations of wild elephants; scientists; and non-governmental organizations have expressed their concern that this decision will result in an increase in elephant poaching throughout all elephant range states. This legislation should help provide the infrastructure necessary to prevent such an increase in Asia.

The successful implementation of the recent CITES decision to down list elephants will depend upon the members of the Resources Committee continuing to assume a leadership role in protecting elephants and other wildlife by creating innovative funding mechanisms, and effective wildlife conservation and protection programs. H.R. 1787 is but one example of the many types of programs that will be needed to protect elephants throughout the world under the new CITES regime.

In another example of environmental leadership, this week I and 40 of my colleagues including Mr. Abercrombie, one of the sponsors of the Asian Elephant Conservation Act, introduced the Endangered Species Recovery Act. ESRA recognizes that U.S. actions overseas can play a major role in conserving endangered and threatened species—or can contribute to moving them closer to extinction. The legislation would require that Federal agencies consult with the Fish and Wildlife Service or the National Marine Fisheries Service before taking any action that might undermine the recovery of a threatened or endangered foreign species.

All efforts to protect endangered species are important and as such, H.R. 1787 deserves our support. I look forward to hearing the testimony from our panel speakers, and thank them for their efforts to conserve Asian elephants.

Mr. ABERCROMBIE. Mr. Chairman, I believe that you have succinctly summarized all the elements associated with this legislation. In particular, I think that it is important to recognize, and I think we do in the persons of Mr. Jones and Mr. Ferguson, that the responsibility of the United States of America and, by extension, the responsibility of our overall Committee and this Subcommittee is not just national but international in scope.

The United States has been given by fate and history the responsibility of taking a lead role with respect to the preservation and protection of species not only in this country but across the world. We know, of course, that species are interconnected.

We are all interconnected and that borders, as such—that is to say geographic borders—political borders—even regional considerations, are not the sole criterion, let alone the scientific basis, for making decisions with respect to species preservation and protection.

So this Committee—this Subcommittee I should say, Mr. Chairman, particularly when it comes to questions of transnational considerations I think has taken a lead under your leadership with respect to understanding the relationships of species throughout the world. And to the extent and degree the United States of America can participate on a worldwide basis in this activity, I think that it is our obligation and opportunity.

And I am delighted to be here with you today and to be a co-sponsor of this bill. I look forward to the Asian Elephant Conservation Act being, if you will, the next step after the original Act where the African elephant was concerned in proving that there can be success international cooperation which hopefully will extend into other political and social areas as well. Thank you very much, Mr. Chairman.

Mr. SAXTON. I thank the gentleman from Hawaii. We have been joined by the distinguished gentleman from California, Mr. Farr, who I believe also may have an opening statement.

**STATEMENT OF HON. SAM FARR, A REPRESENTATIVE IN
CONGRESS FROM THE STATE OF CALIFORNIA**

Mr. FARR. Well, thank you very much. I don't have an opening statement, more of an observation and comment, Mr. Chairman, and I appreciate you having this hearing on this very interesting issue.

I think I feel as you do and others do on this Committee that these breeding programs, if they indeed support animals in the wild, are appropriate. The concern I have, and as we get into the discussion today and as we draft the bill—get into the markup, I hope that none of the moneys that become appropriated from these funds would be used for captive breeding programs if there is no possibility of reintroduction of the animals into the wild.

I don't think we ought to be breeding animals in sustained captivity and use taxpayers' moneys to do that, that essentially be used for commercial purposes. And I don't think the moneys ought to go to organizations or entities that breed elephants for commercial purposes. And I hope you will keep that in consideration.

As we ban the import of animals from the wild, what we are doing is then wanting to increase the stock in a lot of areas. And what we do is we use—it ends up that we end up even with zoos selling their stock for commercial purposes. And I hope that that is not the intent and that we prohibit any moneys from being used for that kind of purpose. Thank you.

[Statement of Mr. Young follows:]

STATEMENT OF HON. DON YOUNG, A REPRESENTATIVE IN CONGRESS FROM THE STATE
OF ALASKA

Mr. Chairman, as a cosponsor of H.R. 1787, I am pleased that you are holding this hearing on our legislation to create an Asian Elephant Conservation Fund.

This measure is modeled after the highly successful African Elephant Conservation Act of 1988 and the Rhinoceros and Tiger Conservation Act of 1994. It will authorize up to \$5 million per year to be appropriated to the Department of the Interior to fund various projects to conserve the Asian elephant.

This flagship species of the Asian continent is in grave danger of extinction. According to international experts, there are less than 45,000 Asian elephants living in the wild. On a daily basis, these animals face the loss of their forest habitat, poachers who kill them for their bones, hide, ivory and meat, capture for use in Burma's timber industry, and conflicts between elephants and man. While Asian elephants are found in 13 countries in South and Southeast Asia, nearly half of the wild population reside in India. Unless immediate steps are taken to help conserve this species, it will continue to disappear from its historic habitat.

By enacting this legislation, it is my hope that the Department of the Interior will fund projects to update census figures, monitor known populations of Asian elephants, assist in anti-poaching efforts, develop improved conservation management plans, translocate highly endangered elephants, and educate the public on the value of protecting this species.

This small but critical investment of U.S. taxpayer money will be matched by private funds and will significantly improve the likelihood that wild Asian elephants will exist in the 21st Century.

We should not idly sit by and allow this magnificent animal to disappear from this planet. H.R. 1787 will not solve all of the problems facing the Asian elephant but it is a positive step in the right direction.

Mr. SAXTON. I thank the gentleman. We will now move to our first panel which is, of course, as Mr. Abercrombie noted, made up of Marshall Jones and Dave Ferguson, both of the U.S. Fish and Wildlife Service. Mr. Jones is Assistant Director for International Affairs, and Mr. Ferguson is Chief, Branch of Middle East, South

Asia, and South African International Affairs. Mr. Jones, please proceed.

STATEMENT OF MARSHALL P. JONES, ASSISTANT DIRECTOR FOR INTERNATIONAL AFFAIRS, UNITED STATES FISH AND WILDLIFE SERVICE; ACCOMPANIED BY DAVID FERGUSON, CHIEF, BRANCH OF MIDDLE EAST, SOUTH ASIA, AND SOUTH AFRICAN INTERNATIONAL AFFAIRS, UNITED STATES FISH AND WILDLIFE SERVICE

Mr. JONES. Thank you, Mr. Chairman. I have a written statement which I would like to ask your permission to have entered into the record. I will try to be brief in my remarks.

Mr. Chairman, when it comes to the Asian elephant, I think the important word to focus in on is opportunity. Right now, we are missing those opportunities to be a positive force for conservation from the U.S. Government because we don't have a specific authorization or a specific program. We have a lot of projects which in one way or another have benefited Asian elephants.

On my right is Dave Ferguson, who administers our program in India, which uses Indian rupees, which have accumulated and are dedicated to wildlife purposes—we have had a 10-year study of Asian elephants under that program, for example.

I also have with me here, Dr. Susan Lieberman from our CITES Management Authority. She and Mr. Mark Phillips, who administers our African elephant program, are involved also in our CITES implementation where we have done things that will benefit Asian countries in terms of their CITES implementation.

We have some indirect benefits to Asian elephants from our rhino-tiger program. Fred Bagley, who administers that program, is also here working with Dave. But, Mr. Chairman, we don't have any specific way to provide direct assistance to countries outside India if they come to us to ask for help with, for example, dealing with Asian elephant habitat needs; surveys of the population; work with local communities to help find ways to resolve conflicts between elephants and local villagers.

We don't have a specific authorization, and we don't have a source right now for a program that will enable us to be a partner with all of the other organizations that are represented here today, many of whom are already very active in doing what they can to help. So, Mr. Chairman, we think that is a missed opportunity.

On the other hand, thanks to you and to Mr. Abercrombie and the other co-sponsors of this bill, what you have put before us now is a chance to capitalize on an opportunity; for us to step forward to work in partnership with the range countries where Asian elephants occur; with nongovernmental organizations; with the corporate sector, like Ringling Bros., organizations that are genuinely interested in the conservation of Asian elephants in their native habitat.

Mr. Chairman, we are prepared to do our best to take advantage of that opportunity, to work with you and this Subcommittee, with the Congress as a whole and with all of these partners if this bill is enacted.

You will hear later today, Mr. Chairman, from a number of organizations that can tell you about the plight of the Asian elephant.

I think it is also very nicely dramatized in the graphics that we have here today.

Something else that really affected me, Mr. Chairman, is that very recently I had the opportunity to go through the exhibit that is in the lower level of the National Gallery of Art right now on the Angkor civilization of Cambodia. And in the very last room of that exhibit there is a statue right in the center of the room. It sits on a pedestal so that it is just about at the height of your eyes. It is a statue of the god, Ganesha, which has the body of a human but the head of an elephant.

And, Mr. Chairman, I stood there for a few minutes very recently when I was there at the exhibit just looking at that statue. And that statue looks so powerful you almost feel like it could leap right off the pedestal and run through the room. And I thought about what that meant, Mr. Chairman. An artisan almost a thousand years ago was inspired by the power and the grace and the beauty of the Asian elephant to make that sculpture and has given us that feeling that he or she had in carving it.

And I was even more affected, Mr. Chairman, when I found out that the name Ganesha means the resolver of difficulties. And I thought what you have done here with this bill, Mr. Chairman, has given us in the executive branch the opportunity to be resolvers of difficulties ourselves.

And so we think that the spirit of that Asian elephant god is what should motivate all of us to be resolvers of difficulties, to work together, to extend a helping hand to the people in Asian countries who need our help to conserve this precious resource, and we are prepared to do our best to implement this bill if it is enacted into law. Mr. Chairman, with that, I think I will close and be prepared to answer any questions that you may have.

[Statement of Mr. Jones may be found at end of hearing.]

Mr. SAXTON. Thank you very much, Mr. Jones. I can tell by your testimony how dedicated you are to these issues—not just your testimony, but by your history of your activities in these matters, and we appreciate that very much. We know that these programs that we put into law work because folks like you and Mr. Ferguson are here to see to it that they are implemented in an effective way, and we appreciate that. Mr. Ferguson.

Mr. FERGUSON. I have no comments at this time. No. Thank you.

Mr. SAXTON. OK. Then we will begin with some questions. Mr. Farr brought up an interesting subject which, frankly, I had not contemplated, and that is whether or not we are somehow helping to subsidize commercial enterprise. And I think this kind of leads me to a series of questions.

Obviously, the \$5 million, if it is to be appropriated in each of the 5 years, or some part of that \$5 million will go a long way toward providing a spark I suspect to encourage a variety of other entities to become involved in the conservation program and those efforts by other governments, by other conservation groups. And I suspect that in some cases we are hoping to encourage the participation of commercial enterprises in the conservation project as well.

So can you describe for us how you see these moneys being used and the relationship that they will have to other countries, other conservation groups, and other commercial enterprises?

Mr. JONES. Thank you, Mr. Chairman. First of all, Mr. Chairman, I would note that the bill itself says that its purpose is to provide for the conservation of Asian elephants, and it has a definition which we think is very well-constructed. It is a definition that uses concepts which are already found in other legislation tracing back to the Endangered Species Act and the African Elephant Act and the Rhino and Tiger Act and probably others too.

So I think the bill itself, first of all, sets a very clear ground rule that any project we would approve must contribute to the conservation of the species, and there are a number of specific activities which are defined within the bill as constituting conservation.

Now, Mr. Chairman, we are definitely not prejudiced against commercial enterprises, and we are looking forward to having opportunities to work with them. Those joint efforts would be—need to be ones that fit within the definition and the scope of the bill, and that is conservation of the species.

We also see a tremendous role, of course, for nongovernmental organizations; not only nongovernmental organizations in the United States such as the ones that will be testifying and the ones that have helped bring this bill along, but also sometimes smaller nongovernmental organizations within the range countries themselves, ones that are sort of grassroots organizations.

There is an opportunity we think for everyone to participate in this. There are international controls on commercial trade in species that are listed under CITES, the Convention on International Trade and Endangered Species. Appendix I of CITES generally prohibits commercial trade.

On the other hand, there are legitimate exceptions in CITES for species that have been bred in captivity and meet certain standards, and we have been trying to work with, for example, the circus community to find ways to be able to help them in their efforts with captive breeding and, where it is possible, to look ahead to legitimate trade under CITES that fits within the broad provisions.

Commercial trade between two Asian countries for animals that would be used as beasts of burden probably would be and should be prohibited by CITES, and we would have no intention of being part of any program that was only for using elephants as commercial or work animals and didn't have a conservation aspect to it.

Mr. SAXTON. Mr. Farr—

Mr. FARR. Mr. Chairman—

Mr. SAXTON. Go ahead, please.

Mr. FARR. Thank you very much, Mr. Chairman. Well, I am a little concerned with that response because I think it is pretty broad. You know, I am used to preserving the mountain lion that is not in my district and certainly the California condor. There is never anything in those programs where you do habitat preservation or management that allows for some commercial spinoffs of that, to allow to breed the mountain lions either or provide habitat so that they can be used for any kind of commercial purpose.

And I think unless you really put the emphasis on reintroduction of the animals in the wild and preserving the wild, then the pur-

pose for this legislation is inappropriate. I would like to see you tightening it up so that these captive breeding programs—that there isn't any—if there is no possibility of reintroducing the animals to the wild or protecting the wild, then we ought not to be funding that program. Private sector funding can take care of that.

Mr. SAXTON. Let me reclaim my time, and let me just pursue a couple of items on this point. It is not our intent, and I am sure it is not your intent, Mr. Jones, to subsidize a breeder of Asian elephants that has in the United States or elsewhere a facility which is intended to breed and raise Asian elephants for sale or strictly for commercial purposes. Is that correct?

Mr. JONES. Yes, Mr. Chairman. This bill is focused on the conservation of the Asian elephant in its range country. And I would say, Mr. Farr, I don't disagree with anything that you have said. I said we were looking for ways that we could work with the private sector. That is separate from this bill. We have other ways that we work with the private sector where they are interested in contributing to the conservation of Asian elephants in their range countries.

All of the grants that we would give under this program we would want to be focused on enhancing the conservation of Asian elephants in their range countries. That means protecting their habitat. It certainly does not mean that we would somehow be subsidizing or financing captive breeding operations, for example, in the United States.

That is a completely separate thing. We do seek to work with circuses and other entities where we can to encourage responsible breeding in the United States, but that is a separate thing. And that is not something that would come under the scope of this bill.

Mr. SAXTON. Mr. Jones, let me just ask one other question. A very important part of the program as you see it, I assume, is trying to involve and encourage the participation of commercial enterprise, private sector investment.

And, therefore, it would seem to me that we need to be very careful in addressing Mr. Farr's concerns not to exclude those folks who you seek to involve in the program from being involved because they are commercial and inclined to take part in a conservation effort.

In other words, if we are to put in place language that prohibits the very activities that we are trying to encourage, we would be counterproductive. And I just want to make sure we all agree on that point.

Mr. FARR. If I may, Mr. Chairman, I don't think we ought to use taxpayers' moneys to subsidize the breeding of elephants in captivity to be used for circuses or for shows. I mean, I don't think that is the intent of having that animal on this earth. I do believe in the idea of preserving the habitat, as we are with the condors or with other kinds of endangered species, and I applaud that.

I think, frankly, you are going to have to buy up habitat, and we are going to have to protect it and manage it and give people economic training on how ecotourism can be a replacement for the subsistence economy that so many of these rangelands have to live on.

Mr. ABERCROMBIE. Mr. Chairman?

Mr. SAXTON. Mr. Abercrombie.

Mr. FARR. I support that but I don't support, you know, subsidizing—

Mr. SAXTON. I think we are all agreeing. Mr. Abercrombie.

Mr. ABERCROMBIE. We are. Yes. If you would yield to me, Mr. Chairman, perhaps I can help relieve Mr. Farr's very legitimate concern. And perhaps, Mr. Jones, if you could engage in a bit of dialog with me, perhaps you as well, Mr. Ferguson. Both of you are aware—Mr. Jones, in particular—I believe you are aware of the hearing we had previously—an informational hearing—Asian elephant or information that came to us about habitat and clash, the competition for habitat between—particularly as urban areas expand in south Asia. You are familiar with this whole situation, are you not?

Mr. JONES. Yes, sir. Although I didn't participate in that hearing, I am familiar.

Mr. ABERCROMBIE. But you understand the concept. Yes. Here is the point. As I said, Mr. Farr has a legitimate concern. The intent of this legislation and the way it is written is not to subsidize in any way, shape, or form commercial enterprise.

However, in order to gain the cooperation of nations, regions, municipalities, areas, organizations, private sector, corporations, for that matter—you know, in other words, the whole range of social and economic infrastructure that is emerging in Asia, which, by definition, clashes with, confronts, constricts, restricts—any combination thereof—the Asian elephant in what might otherwise be its natural habitat, wanderings, existence.

We have to encourage local entities, regional entities, whether they are political or social or economic or some combination, to work with us on this, to work with Dr. Sukumar and others in the scientific community and in the preservation community who might otherwise not have any leverage whatsoever to be able to withstand that kind of competition.

The Asian elephant has always existed, has it not, in a context within which its contact with human beings is fairly frequent, fairly consistent. Now, in some instances, of course, domestication takes place. Right? And we know it takes use in logging. That may still have a very efficacious relationship. It may be that the Asian elephant will go the way of the draft horses of even my youth.

Draft horses were still used to some degree when I was a young boy, but almost by definition at the time of my grandfather that use of draft horses had disappeared and they became—in order to preserve the draft horses. Are you familiar when I say a draft horse—one of the world's most magnificent animals?

They made appearances at county fairs in what you call horse-pulling contests, the pulling of weight. I don't know if you have ever seen one. It is one of the great sights between human beings—I mean, relationships between human beings and animals that it is possible to see—a test of strength and cooperation and all the rest of it. But they had become anachronisms.

My grandfather was very reluctant to give in to the internal combustion engine, and they actually delivered baked goods, for example, in Buffalo, New York, by horse-drawn carts right up past

World War II, and he stayed with it as long as he could—stayed with the horses.

Now, it may be the Asian elephant is going to be in that category of I am going to say an artifact, and I don't mean that in any kind of pejorative sense or any kind of sense where they end up being a statue in a display at the National Gallery. But in order to do that, we have got to make sure that we can attract the favorable attention of those who are being impacted by the clash, if you will, of Asian elephants and modernity throughout south Asia.

I am sorry to have taken so long with this preamble, but I hope you see where I am going. I agree entirely with Mr. Farr, but we don't want to write legislation in such a way as to actually inhibit us being able to attract these other entities into supporting our conservation efforts. Is that making sense? You have these kinds of—is that the kind of thing you are doing now in India?

Mr. JONES. Mr. Abercrombie, let me turn to Dave Ferguson in a moment to talk about some of the things we have done in India. But I would say that, in general, we are looking for partners who are committed to the same conservation goals that you are in the drafting of this bill. And those partners could be from the private sector.

They can be other organizations in the private sector. Those can be nongovernmental organizations, and they certainly also could be commercial enterprises. But, of course, they have got to be committed to the conservation goals that are in the bill that you have drafted.

Mr. ABERCROMBIE. Yes. One of the ways we attracted people to help us with the African elephant was because—were hunters. They could see if everything worked out right here, perhaps they would be able to go back to hunting. Now, not everybody was in favor of that.

But in order to get the broadest possible support—and I will state, Mr. Chairman, for the record, I think one of the reasons we succeeded and are succeeding where the African elephant was concerned is that the originators of the legislation with the African elephant were wise enough to see that by broadening the base of support that we would have a better chance at success.

Mr. JONES. Mr. Abercrombie, I couldn't agree more. In terms of Asian elephants as work animals, you know a lot more about draft horses than I do, but I have seen them. They are magnificent. Asian elephants—

Mr. ABERCROMBIE. They are more than just commercials for Budweiser. My grandfather was the foreman on an eight-horse hitch. That is where you get the word teamster from—teams of horses—eight-horse hitch. They delivered the beer.

Mr. JONES. Mr. Abercrombie, I don't know if elephants have ever delivered beer, but they certainly deliver other services, and that is an amazing relationship. I suspect that you are right over time when you go to countries in Asia where a few years ago they may have been doing this; today what you have got is a suburb or a city with people all carrying cellular phones in their hands. And those are probably not people who are thinking of Asian elephants anymore.

Mr. SAXTON. Mr. Farr would like to—

Mr. FARR. One question.

Mr. SAXTON. One short, final thought.

Mr. FARR. In your statement, you said none of this money would be spent in the United States. Is that correct?

Mr. JONES. Mr. Chairman, I would not anticipate unless it was for some kind of a data base or something else that might be here, but our African elephant funds and our rhino and tiger funds, those funds are all spent either in the range countries or with international organizations that are devoted to conservation like the CITES secretariat or the IUCN, and I would anticipate the same with the Asian elephant.

Mr. FARR. So these funds don't trickle down to the zoo breeding program?

Mr. JONES. We have worked with zoos, but those were zoos that had programs in the range countries.

Mr. FARR. So the incident that happened in the Portland Zoo where the Asian elephants were bred and have not had a very successful life thereafter, this money wouldn't reach entities like the Portland Zoo?

Mr. JONES. Mr. Farr, unfortunately, I don't know enough about the Portland Zoo I think to comment on that, but we could take a look at that, and I certainly could give you—

Mr. FARR. Well, they are one of the country's foremost zoos in breeding Asian elephants, and there has been a lot of problems with it, and that is what I am concerned about. You know, I think the best thing you can do is protect the habitat, and from then you have got at least rangeland in which elephants can survive. Without protecting the habitat, you are not going to protect them. Thank you.

Mr. SAXTON. Thank you very much. And I would like to thank Mr. Jones and Mr. Ferguson for being with us this morning.

Mr. ABERCROMBIE. Mr. Chairman?

Mr. SAXTON. Mr. Abercrombie for one quick, final thought.

Mr. ABERCROMBIE. No, no. I thought we were all working on your extended time. I am sorry. I had a couple of questions. They are fairly short, and we can submit some questions to you as well, I presume. You spoke about your ability to use currency that may have accumulated in the Treasury of the United States by the United States which stays in-country, and you cited India—rupees that from whatever base are under your jurisdiction or could be put under your jurisdiction by the President or by the Congress.

Mr. JONES. Yes, sir.

Mr. ABERCROMBIE. Would you think it would be useful to write into this legislation, if it is possible, and I don't know—maybe it would take a separate bill—permission to transfer or change currency to promote studies, programs, support, et cetera, such as you now have in India into the currency of other nations in order to do this?

The reason I say that is is that range doesn't necessarily respect borders. Habitat doesn't respect borders that are arbitrarily made by human beings. It might even be one day that we could get some kind of cooperation from Burma, that kind of thing. Would that be useful?

I don't know if it can even be done in this particular legislation, but it would seem to me that it would be useful for you to have that kind of ability to be able to change currency or transfer currency. I am not even quite sure of the phrase I should use.

Mr. JONES. Mr. Abercrombie, the program we have in India, you are right. Those are Indian rupees that are owed to the United States. They cannot be turned into dollars. There is a large amount of them, and the Department—is it the Treasury, Dave?—that has this program, and different agencies a number of years ago were able to make proposals for spending of that money.

We got approval and a fund has been dedicated to this. The funds are going to run out. They are not endless. We have had programs in some other countries, and let me just have Dave say a very quick word about other countries that we have worked in, but I don't think any of those are Indian or Asian elephant range countries. Is that right, Dave?

Mr. FERGUSON. Well, just for clarification, these special foreign currencies that we have been discussing—Indian rupees—are part of the Public Law 83-480, the Agricultural Trade Development Assistance Act, which allows the transfer of surplus agricultural products to other countries. They pay for them in their local currencies.

They are kept track of by the Department of Treasury, and when they reach a certain amount which is excess to the needs of the United States in that particular country, then they become available for various purposes which U.S. Federal agencies can take advantage of it.

So the Endangered Species Act of 1973 has a specific phrase in it in Section 8[a] which deals with international conservation efforts allowing the Secretary of the Interior to utilize excess foreign currencies wherever they are available for enhancing the status of wildlife, particularly endangered species. So using—

Mr. ABERCROMBIE. Are those funds transferrable from one country to another? Because India might generate a lot of money, and Thailand may generate not as much or virtually nothing.

Mr. FERGUSON. Well, that is true. Over 20 some odd countries have come on the list and off the list, but these transactions are going on all of the time even now, but there are different categories of these funds. And the categories—

Mr. ABERCROMBIE. Anyways, I appreciate that. I don't want to take more time right now, but that is something we could usefully look at I think, Mr. Chairman, as a possibility for helping to get funding. Thank you, Mr. Ferguson. I didn't mean to cut you off, but we are under a little bit of time constraint.

Mr. SAXTON. Thank you very much, and thank you, Mr. Jones and Mr. Ferguson. And we are going to move on to our second panel at this point. It consists of Dr. Terry Maple, President and CEO of Zoo Atlanta; Dr. Raman Sukumar of the Center of Ecological Science of the Indian Institute of Science; and Dr. Eric Dinerstein, the Chief Scientist and Director of the Conservation Science Program at the World Wildlife Fund.

And while these gentlemen are taking their places, I should have and neglected to ask unanimous consent that Chairman Young's statement be included in the record at the appropriate point after

the opening statements that were given, and so I do so at this point.

Welcome to three very well-known individuals, Dr. Maple, Dr. Sukumar, and Dr. Dinerstein. We are very pleased that you are here with us. We are, obviously, interested in your testimony and anxious to hear what you have to say this morning. So as soon as you are prepared, Dr. Maple, welcome back with us again, and the floor is yours.

**STATEMENT OF DR. TERRY MAPLE, PRESIDENT/CEO, ZOO
ATLANTA**

Dr. MAPLE. Well, thank you very much. I might add that in addition to my own zoo, Zoo Atlanta, I am speaking today for the American Association of Zoos and Aquariums, and on behalf of AZA I would like to express my appreciation for the concern and interest that Chairman Saxton and this Subcommittee have historically shown for the conservation of threatened and endangered species. And I would especially like to thank the Chairman and Congressman Abercrombie for introducing this bill and thanking the Subcommittee members who have co-sponsored it.

The AZA strongly supports this legislation. The AZA represents virtually every professionally operated zoological park, aquarium, oceanarium, and wild animal park in North America, as well as 6,500 individual members. More than 119 million people visit the AZA's 180 accredited zoos and aquariums each year.

In 1988, this Subcommittee recognized the serious threat the African elephant faced from poaching and loss of habitat by strongly supporting the African Elephant Conservation Act. While the Act's imposition of a ban on the importation of African ivory was important, the establishment of the African Elephant Conservation Fund has made the Act critical to the survival of the species.

This fund is the only continuous source of money to assist African countries and organizations in their conservation efforts to protect and manage elephants. The fund has supported over 50 conservation projects in 17 range states to enhance habitat protection.

Regrettably, the Asian elephant is in need of similar help. It faces serious threats, not just from ivory poaching, but from a greater threat—the loss of habitat due to rapidly expanding human populations.

By creating the Asian Elephant Conservation Act and its subsequent fund, the United States will have the opportunity to once again demonstrate its leadership and commitment to wildlife conservation. The Asian elephant is a flagship species for the tropical forests of Asia. Securing its long-term viability will, in turn, assist in the conservation of many other animals, including tigers, rhinoceros, Asiatic wild dog, and others.

Unlike the African elephant, whose populations range between 600,000 to 700,000, the Asian elephant population only numbers between 35,000 to 45,000 animals. And this population is highly fragmented throughout 13 countries. Only in four areas does the population consist of more than 1,000 animals.

The goals of the Act and its subsequent fund would be the following: one, protection of the remaining elephant populations and their habitat; the establishment and management of specially pro-

tected areas; reduction of captures from the wild, most notably in Burma; and promotion of effective community enforcement programs.

This bill would focus on remedies that address human-elephant conflict resolution. The Act would give support to projects that accomplish one or more of the following: directly promoting wild elephant management practices; monitoring population trends; assessing annual ranging patterns; enforcement of CITES; encouraging law enforcement through community participation; translocating elephants; and the conduct of community outreach and education.

Today, AZA institutions exhibit 155 Asian elephants. Asian and African elephants are magnificent creatures. They are difficult to exhibit, manage, and breed. They have complex social structures, at times rivaling those of humankind. They are extremely intelligent.

You should know that zoos engage in three types of conservation—captive propagation, conservation in range countries, and conservation education in our local communities and in range countries. An example of the first type is the work that the San Diego Zoo and the LA Zoo did to save, breed, and reintroduce the California condor.

As important as it is for our institutions to educate our visitors about the life patterns of the Asian elephant, it is equally important that resources be made available to protect the wild Asian elephant populations in its habitat.

AZA strongly believes that H.R. 1787 should receive the full support of this Committee for the following reasons: it will provide competitive financing where it is needed most—in the wild to support protection, conservation, and management of threatened Asian elephants.

It is focused and cost effective, yet flexible enough to address immediate needs for conservation. It will encourage donations from private sources. Many zoos, for example, will donate to this program—a fine example of public/private partnerships. And funding requests will be based on sound science. We thank you for the opportunity to endorse this bill.

[Statement of Dr. Maple may be found at end of hearing.]

Mr. SAXTON. Dr. Maple, thank you very much. We will move now to Dr. Sukumar.

STATEMENT OF DR. RAMAN SUKUMAR, CHAIRMAN, IUCN/SSC ASIAN ELEPHANT SPECIALIST GROUP

Dr. SUKUMAR. Thank you, Mr. Chairman, for this opportunity to speak on behalf of the Asian elephant. The Asian elephant, which has shared a special bond with people for over 4,000 years, now faces an uncertain future. Its total population in the wild and in captivity is under 10 percent of that of the African elephant.

Of the estimated wild population of 50,000 elephants, about 50 percent is found in a single country, India. Other important populations are seen in Burma, Indonesia, Sri Lanka, Thailand, and Malaysia. Its status is unclear in potentially important countries such as Laos, Cambodia, and Vietnam, although it is known that elephants are in relatively low numbers. Elephant populations in China, Bangladesh, Bhutan, and Nepal are relatively insignificant.

Fewer than 10 populations, six of them in India, have over 1,000 elephants each, a level I believe is needed to ensure its long-term viability. The majority of populations have much fewer numbers, often less than 100 or 50 elephants each, which are not viable even in the short term.

There are several causes for the decline of the elephant in Asia, and other speakers have mentioned this. The loss and fragmentation of habitat due to expansion of cultivation, settlement, and developmental projects have squeezed elephant populations into small, unviable areas. And this is a process that occurs in countries such as Malaysia, Indonesia, India, and Sri Lanka.

The loss of forest to agriculture occurs in a different context in northeastern India and countries such as Burma, Laos, and Cambodia. Here, slash-and-burn shifting cultivation on hill slopes has denuded forest cover considerably.

The second major cause for the decline of the elephant is its capture and killing in large numbers. During the past century alone, up to 100,000 elephants have been captured in Asia. It is now certain that the extremely low densities and numbers of elephants in many southeast Asian countries, particularly the Indo-China region, is due to hunting of elephants for ivory, meat, skin, and other elephant products.

Equally, if not more important, is the consumer demand for elephant products such as ivory from east Asian nations, in particular Japan. A new wave of ivory poaching is sweeping through Asia affecting countries such as India. Here, the selective poaching of male elephants for tusks has caused serious imbalances in the population structures. As the number of male elephants declines and sex ratios become unequal, genetic variation is lost to the detriment of the population.

A socioeconomic dimension to the problem of conserving elephants is the impact of elephants on humans and their crops and property. As habitats become fragmented and elephant populations compressed, there is escalation of crop depredations and man-slaughter by elephants.

Several hundred people are killed by wild elephants each year, often when elephants enter crop fields and settlements at night in search of forage. The economic losses to crop damage by elephants run into several million dollars annually in Asian countries.

The coming century will decide the ultimate fate of the Asian elephant and other creatures on this earth. Fortunately, with the elephant, the problems have been well identified and solutions available to ensure its survival and long-term conservation.

Basically, I think there are four major aspects to the conservation of the elephant, three of which have to do with the wild populations and one with captive populations. These are maintaining viable, contiguous habitats of high quality through setting up of networks of protected areas; two, minimizing elephant-human conflicts through appropriate measures; three, controlling the poaching of elephants for ivory and other products; and, four—and this is important I believe because 30 percent of the total population of the Asian elephant is found in captivity in Asian countries—we have to properly manage the large numbers of captive elephants through proper health care, training, and use.

Although the task is enormous, given the wide geographical spread of the species, there is urgent need to consolidate upon and expand the scope of various conservation projects being carried out on a small scale.

Over the past two decades, the Asian Elephant Specialist Group has been the most active player in elephant conservation efforts in Asia. The considerable achievements of the AESG and other organizations and institutions have been made with very modest funding. The time has come to implement the conservation strategies which have evolved over the years, and this calls for much higher levels of funding from the international community.

The irony that I personally see in the plight of the Asian elephant is that it is arguably the ultimate flagship species for conservation of biological and cultural diversity in Asia. The elephant is a keystone species in the tropical forests of south and southeast Asia, which are biologically one of the most diverse regions in the world.

Conserving the wild elephant would automatically ensure that hundreds of thousands of plant and animal species would also be conserved in Asian tropical forests. The proper care and management of captive elephants in Asia would ensure that elements of the rich cultural heritage of this region would be preserved. We surely have a responsibility to saving the most magnificent of our fellow creatures. Thank you, Mr. Chairman.

[Statement of Mr. Sukumar may be found at end of hearing.]

Mr. SAXTON. Thank you very much, Dr. Sukumar. Dr. Dinerstein.

STATEMENT OF DR. ERIC DINERSTEIN, CHIEF SCIENTIST AND DIRECTOR, CONSERVATION SCIENCE PROGRAM, WORLD WILDLIFE FUND

Dr. DINERSTEIN. Thank you very much, Mr. Chairman. I am here on behalf of the World Wildlife Fund and its 1.2 million members to urge your support for this important legislation to help conserve Asian elephants.

Over the past few months, we have heard a lot about the recent CITES meetings and newspaper articles filled about the plight of African elephants. And this hearing marks an important opportunity to really turn the spotlight on the much more endangered species of elephant, the Asian elephant.

Those of us who are involved in Asian elephant conservation wish we had the problems that are faced in Africa where you still have over 650,000 individuals, who have large populations, and many populations that are more than 1,000 individuals. There are far fewer elephants in Asia. There are far fewer individual populations with more than 1,000 individuals, and the habitats are much more fragmented.

We need to address conservation on several different fronts. The first thing that we need to do for Asian elephants is to undertake an exercise that we have recently done for tigers, and I have given the members of the Committee a series of maps that we have prepared on the distributions of Asian elephants, tigers, and rhinos.

But we have recently published a book in collaboration with the Wildlife Conservation Society that takes the 160 areas where tigers

occur across Asia and prioritizes them so we invest our efforts in the 25 areas that provide the greatest chance of conserving tigers for the long term.

The fact is the same thing applies for elephants. We don't have the opportunity to conserve elephants in every place they occur. There are places where we are probably going to lose elephants over the next few decades. But there are places where we have a great chance if we do the right things now and use these funds appropriately to be strategic in where we make our investments.

So we need the same sort of application of looking at where elephants occur, where we can mitigate poaching effects, and where the populations are largest and the best habitat quality to try to conserve them.

And one of the things that you will notice if you look at the maps that we have provided for you is that there are many areas where elephants occur that are along the borders of countries. And this is because this is where some of the most intact and most biologically rich forests occur. So an important part of elephant conservation is going to be involved in transboundary efforts among the countries of Asia.

We also need to look at other ways to find some solutions of having people live in close proximity to elephants. And I am proud to report about one solution to this that we are doing using U.S. taxpayers' money in the country of Nepal funded through a U.S. Aid program in the Biodiversity Conservation Network where we are using funds generated from a community based ecotourism program where tourists go and ride trained elephants to go and observe tigers and rhinos in a park in Nepal.

In the first year of operation, we had 10,500 tourists take part in this, and the local communities who are subsistence farmers went from earning zero dollars in the first year to \$280,000, half of which goes back to the national park and the other half goes back to supporting local community efforts like building schools and health posts.

We also need to look at legislation that recycles some of the revenues generated by national parks back to local people. This is the appropriate economic incentive that will make people more willing to live next to tigers, rhinos, and elephants as their neighbors.

We also need more appropriate and more effective scientific understanding of the dynamics of these populations that Dr. Sukumar has talked about, to track them and to understand which ones have the greatest viability over the long term.

We know from our studies of African elephants how vital they are in the regeneration and maintenance of biodiversity of African tropical forests where in some forests, for example, in the Ivory Coast, that elephants disperse the seeds of 30 percent of all the trees that live in those forests. So we have had a long example of co-evolution of elephants and their habitat that is vital to maintain.

We think that it is very important to focus on these issues in Asia because we have 50 percent of the world's population living in perhaps 13 percent of the land area. And so if we can solve some of these problems using Asia as our prototype where you have high densities of people living around protected areas, this will have

broad application to many other places around the world where we see burgeoning human populations encroaching on nature reserves where you still have a large intact megafauna that can come into conflict with local people. So solving these issues here is very appropriate.

I would like to end with a nonscientific anecdote that I suppose follows after Mr. Abercrombie's story of the draft horses. This is a domesticated elephant story but one that we use in our research. For years, I worked with the Smithsonian Institution studying rhinoceros and tigers in Nepal, and one night we were radio tracking using radio telemetry a rhinoceros, a male that was following a female who was in heat.

And I was doing this sitting on the back of a trained elephant, as purchase order by U.S. tax dollars for the Smithsonian project, that was trained to capture rhinos and capture tigers. We were following along with this elephant and following behind rhinos when all of a sudden in the middle of this—in the middle of the night at one in the morning the elephant stopped in its tracks. And the driver tried to get the elephant to go. He kept pushing it behind the ears which is their gas pedal, but the elephant refused to budge and the rhinos were getting away.

Finally, the elephant took two steps backward and put its trunk down and picked up my databook that I had all the data in over the last year on the species and handed it back to me and then trotted off behind the rhinos again.

Well, this is not an unremarkable story. There are many instances of this of elephants knowing so many commands, knowing how to help us in our research. They have also given us the databook in a sense that we know how to conserve Asian elephants, and now we have to put the scientific knowledge and the conservation will to our purpose to try to conserve these magnificent animals. Thank you.

[Statement of Dr. Dinerstein may be found at end of hearing.]

Mr. SAXTON. Thank you very much, Dr. Dinerstein. Mr. Abercrombie.

Mr. ABERCROMBIE. Thank you very much, doctor. I don't think any of the draft horses I ever came into contact with would have picked up any notes for me. You mostly had to stay out of the way when they were working. Can you tell me what efforts are being undertaken by—the count that we have right now is 13 different range states—that is the phrase we are using—that is the appropriate phrase, is it not—range states—

Mr. DINERSTEIN. Yes.

Mr. ABERCROMBIE. [continuing] governments to preserve Asian elephant habitats? One of the things we are going to run into from our colleagues and from their constituents is why should we spend this money? What are they doing to help themselves? I think you will find Americans are more than willing to get their paddle in the water and pull deep if they feel that other people are in the canoe with them.

Dr. DINERSTEIN. Yes. I think Dr. Sukumar can talk about that for India. Let me talk about a few other places. Let me give some examples of where some of the range states have passed legislation

or enacted activities that really are considered beyond what we are doing in our own country.

For example, in the country of Nepal, it just passed legislation that requires recycling 50 percent of all the revenues generated say from ecotourism or park entry fees back to local development. So this is the first time in Asia this has been done.

But I think this is the critical point. If we are going to have conservation in Asia in the next 20—30 years, local people have to be given incentives to want to live next to large, potentially dangerous wildlife.

Mr. ABERCROMBIE. Let me elaborate on that because we are going to submit these questions to you folks for more elaborate answers which we are going to need in order to satisfy our colleagues' questions and perceptions, and we are under time restraint. I appreciate that answer. In other words, it is now underway. What we need to do is encourage it. Do you believe that if we pass this legislation that will be an encouragement to these range state governments to pass similar legislation or complementary legislation?

Dr. DINERSTEIN. I think so. I think that, you know, for the United States to take an active interest in this and to identify important directions to go in and to put some money where our mouth is on this would go a long ways for us to go over and try to advocate new approaches—

Mr. ABERCROMBIE. We have at least some moral leverage in terms of not just simply being imperialist exponents from some elitist plane to try and influence domestic policy in these countries because we don't want it seen that way. Do you believe the way this legislation is drafted that that will get through that kind of elitist looking down your nose at other people?

Dr. DINERSTEIN. I think it will, particularly if it includes some language that talks about empowering local communities to try to take advantage of the tremendous tourist attractions, for example, that wild elephant herds and other wildlife species maintain those values across Asia. But I think that that really is the trick is that we can come up with ways to try to conserve elephants, to try to address issues like fragmentation—

Mr. ABERCROMBIE. Well, in the intent language then of the bill or the report accompanying the bill, then we have to emphasize that?

Dr. DINERSTEIN. I would recommend that.

Mr. ABERCROMBIE. Perhaps when you respond or others respond, if you could emphasize how you think best that this can get the message to local entities, local governments, communities, et cetera, that were interested in building a cooperative base with them legislatively and otherwise. That would be good.

I wanted to ask one other thing, and, Dr. Sukumar, perhaps you can answer this as well. Dr. Maple, you may have some knowledge of this. Zoos and aquariums across this country, and I expect in other countries, in order to attract support, favorable attention, and so on have numerous programs in which they try to bring people in. I know the Honolulu Zoo even has where you stay overnight so that you can see, hear, and experience what it is like because lots of animals are nocturnal and that kind of thing. So they do things that reach out to the community.

In this particular instance, Dr. Dinerstein, I was intrigued by your point about ecotourism. We try to do that in Hawaii right now. Obviously, I am searching for a hook or a series of hooks that will enable us to attract, again, the favorable attention of our colleagues about spending money.

I think that one of the things that this could do is that people would like to ride elephants. I don't think that that is—because there is, as Dr. Sukumar has indicated, 30 percent of the Asian elephants are domesticated, they are engaged in a commercial side, as opposed to abusing them in that category.

Perhaps with the right kind of program, the idea that people could go to various Asian countries and participate as ecotourists in that, that doesn't necessarily work against the goals of conservation and preservation, does it? And if it does, I want you to tell me. My instinct tells me that it does not when it is properly managed and controlled and the right attitude is put forward.

Dr. SUKUMAR. I think, Mr. Abercrombie, you have very rightly put it, that we need to involve local communities in terms of trying to conserve the species. And I can think of no better way of doing this than by actually promoting tourism which involves elephants—you know, both viewing elephants and riding elephants and so on. And that will be an excellent way of actually trying to get some economic benefits to the local community which would give them incentives for protecting the species.

Mr. ABERCROMBIE. Is it possible, Dr. Dinerstein, that in the context like either the World Wildlife Fund—I mean, your bona fides I think are apparent with respect to your commitment to preservation and conservation. You do not see the ecotourism then, for example, nonshooting safaris, if you will, as anything anasthetical to your goals and purposes?

Dr. DINERSTEIN. Oh, not at all. I think it is one of the most powerful tools that we have to try to link local development with long-term conservation.

Mr. ABERCROMBIE. That also would include then, would it not, helping to make an argument to local communities and governments for the preservation, even the extension of habitat?

Dr. DINERSTEIN. Oh, certainly. I mean, in fact, the program that we have in Nepal is an example. We have managed to extend the buffer zone and restore the habitat where we now have five tigers living in a place and 40 rhinos that we didn't have 4 years ago through these investments.

Mr. ABERCROMBIE. OK. Thank you very much, Mr. Chairman.

Mr. SAXTON. The gentleman's time has expired. Mr. Farr.

Mr. FARR. I like the way that last question is going over. I read nothing in the bill that puts any of the money into that, and I would appreciate it if you want to take a look at the bill to suggest some language that might tighten it up. It seems to me that the best way to make this work is a collaborative effort. You are going to have to preserve the habitat of the animal. Preserving that habitat has got to preserve the economy of the area.

There is a nexus. It doesn't mean that it has got to, one, stop the erosion or the loss of the habitat, but at the same time convert essentially agrarian cultures to a way of doing economic development through ecotourism. And we know how to do that, but we don't re-

quire at all that any of these moneys be collaborative that way. And I think that we ought to tighten that up a little bit, that there ought to be a nexus.

Secondly is I look at these maps that have been placed before the Committee which is the Indo-Pacific ecoregions overlaid with the distribution of elephants, tigers, and rhinos. You really begin seeing—you can get a three-for here. It seems to me if you can preserve the habitats of elephants in some of these regions, you are also preserving the habitats for tigers and the habitats in a very small area for rhinos, particularly in Indonesia.

Is there any effort to try to prioritize a limited amount of funds? This is \$25 million over 5 years—\$5 million a year. Is there any attempt to leverage these funds with other efforts to preserve those ecoregions as well where you can have a multiple effect of preserving habitats?

Dr. DINERSTEIN. Yes, you can. I was in a way hoping you wouldn't do the spacial overlap in your head and see how much there is, but, in fact, I should make a point about these maps. These maps certainly reflect the distribution of the species, not population densities.

So you have to be careful in interpreting that in that there are some places, for example, where tigers reach relatively high densities like parks in Nepal where elephants occur at low densities. And there are places where rhinos occur and similarly for rhinos.

So there is a fair amount of overlap, but there are also places where you have high populations of tigers and maybe not some of the other species. So that's why I think it makes sense to keep the funds separate because also—

Mr. FARR. I wasn't suggesting that they be commingled but—

Dr. DINERSTEIN. Yes, but certainly in terms of strategic planning, yes, there are clearly places. And so if we can get in the next year or so an elephant analysis that is similar to our tiger analysis—we already know where the rhinos are because there are so few populations left.

That would go a long ways to try to I think be much more strategic about addressing concerns for both tigers and elephants, which both have some of the same concerns in maintaining large blocks of habitat and conactivity among the remaining blocks so you can have dispersal and gene flow between them.

Mr. FARR. Is an emphasis placed on buying the habitat?

Dr. DINERSTEIN. Well, it is difficult in that in many of the countries, either it is going to be state owned or privately owned. I think that what we should be focusing on the most is to try to maintain the existing wildlife corridors that exist between reserves so that elephant populations or tiger populations can move between them very easily.

And that is probably our first goal is to maintain existing corridors and then, where appropriate, try to restore them because that is really what you are talking about is appropriating land and trying to restore them.

The one advantage that we have in a lot of elephant habitat is that elephants like habitats that are early successional, that convert very quickly to the natural habitat. You don't have to wait—you don't have generations of patience like you would to regrow a

tropical rain forest. So in one or 2 years, you can have tigers, rhinos, and elephants back in places that were once rice paddies. So that is very possible—to see dramatic results very quickly if you can get the land available. That becomes a tricky political issue in many countries.

Mr. FARR. What is the highest priority? What is your highest priority?

Dr. DINERSTEIN. I would say for elephants right now I would say is to try and identify those places of the areas shown in brown on here that have elephants in them where we have the greatest chance of persistence over the long term right away so that the money that would come from this fund goes to places where it won't be wasted, where it won't be used in places that may not have a long-term future but go to the places where we know we can—we think we can protect elephants in perpetuity.

Mr. FARR. Well, it seems to me we need to tighten that language up a little bit to do that. That makes good sense. And is that your top one?

Dr. DINERSTEIN. Well, certainly, I think that is the top one. And then I think in the other places is simply identifying priorities is the first step. Then I think proper law enforcement. As Dr. Sukumar has written about in his book and other Asian elephant experts have testified, that the loss of the big male tuskers is a real problem. They are being heavily poached. Some of the reserves don't have big male tuskers anymore. So I think strict protection from poaching is critical, which also benefits the tigers—

Mr. FARR. My time is up but just one question. Where is the best training in the world for wildlife game manager enforcement?

Dr. DINERSTEIN. Maybe Dave Ferguson or—there are a number of places that do that. I think in India itself, the Wildlife Institute of India has an excellent program that Dave Ferguson's program has supported for many years that involves issues of law enforcement and management of parks. So, certainly, for the region, that is an appropriate place to be looking.

Mr. FARR. Thank you. Mr. Chairman, I hope sometime we can focus on—you know, whenever we have a NAFTA debate or any kind of trade debate, it is always the environmental side. It comes down to the countries have good laws but inappropriate enforcement. It seems to me that this Committee needs to devote a hearing to enforcement efforts around the world, where they are weak and strong and good and bad and see if we can start using some limited resources to enhance midlevel training.

I am a Peace Corps volunteer, and I found that midlevel technical training—they are hungry for it and the ability to facilitate it—get people to the countries and places that do it. I think America does it very well in almost every area of education. That we undersell and pay too little of attention to that is the next step of sort of economic training that needs to be done in the world.

Mr. SAXTON. Thank you very much, Mr. Farr. Let me ask one final question, if I may. One of the things that we have learned in dealing with species such as the Asian elephant, African elephant, rhinos, tigers, et cetera, is that along with habitat protection one of the major issues that we need to address is the economic incentive to—which dissuades people from conservation measures. With

regard to the Asian elephant, can you talk about those economic incentives? And please concentrate in particular on the traditional Chinese medicine issue which I understand causes a great deal of concern. Anyone who wishes to—

Dr. SUKUMAR. Well, I don't think the parks of Asian elephants are really involved in Chinese medicine. I know that tiger parks are involved but not elephant. I don't think elephant is really used in Chinese medicine.

Dr. DINERSTEIN. Nowhere near the extent that rhinos or tigers are. We are not facing that. It is really the ivory threat.

Dr. SUKUMAR. It is really ivory—the underskin to a certain extent, yes.

Mr. SAXTON. Are there other economic incentives to hunt or kill Asian elephants?

Dr. SUKUMAR. Apart from ivory and skin, no. I mean, that is, of course, killing of elephants for meat, there are certain tribes in northeast India and southeast Asia who eat elephant meat, but that is the other incentive for killing elephants.

Mr. SAXTON. So this is not, in the vernacular, a big deal—

Dr. SUKUMAR. Yes.

Mr. SAXTON. [continuing] in the big scheme of things? OK. Well, thank you very much. We appreciate all of your testimony and thank you for sharing with us your perspectives. Mr. Abercrombie?

Mr. ABERCROMBIE. Mr. Chairman, I mentioned during the course of the testimony for both panels and I think for those who have consulted with us and given us their testimony previously, could I ask that some of the questions put forward to us in our background material and perhaps some other questions be put to the witnesses in the hopes that the answers we get back will help us write the legislation more comprehensively?

Mr. SAXTON. That is an excellent suggestion. If staff will forward on the appropriate questions which are in our packet, then we will ask you if you will submit some answers in writing to us. Thank you very much. We are going to move to panel number 3; Dr. Michael Stüwe, Research Associate of the Smithsonian Institute; Dr. Mary Pearl, Executive Director of the Wildlife Preservation Trust International; and the Honorable former member of this House, Andy Ireland, Senior Vice President of Feld Entertainment, Inc. Please take your places. We are anxious to hear your perspectives as well. And, Dr. Stüwe, when you are comfortable in your place and sufficiently organized, you may begin.

**STATEMENT OF DR. MICHAEL STÜWE, RESEARCH ASSOCIATE,
CONSERVATION AND RESEARCH CENTER, SMITHSONIAN IN-
STITUTE**

Dr. STÜWE. Yes. I am comfortable. And first of all, I guess I have to say that I am a research associate with the Smithsonian, but they told me as I am not a permanent employee, I cannot speak for them officially. So I would like for you to take this testimony as testimony of a scientist who works in Asia on Asian elephants.

Mr. SAXTON. Very well. Thank you very much.

Dr. STÜWE. But still this morning when I came in, I went to the Natural History Museum, first of all, before it opened up. I went into the big entrance hall, and I looked at the elephant there—that

monster of an elephant standing there with nobody else in that big hall. And I realized going to this meeting that that is what we have to do, we have to protect the elephant.

Mr. SAXTON. Doctor, I wonder if you might pull the microphone a little closer.

Dr. STÜWE. When I was walking around the elephant there all by myself, hearing my footsteps, thoughts went through my mind from a few weeks ago when I went out with the Malaysian Wildlife Department to capture elephants—capture elephants in the plantations, in the crop fields in southern Malaysia, and translocate them up into national parks. And for days and days without end, we were visiting homesteads and farms and plantations that just the night before had been completely destroyed by elephants.

So in my statement here instead of repeating much of the data on elephants that we have heard already, which is already in the public record, I want to concentrate on two items that I think are most important. And the most important item I think is the human-elephant conflict.

It is what we see as a magnificent species over here that needs protection, and the little landowner over there in Malaysia or the other countries whose crops get raided season after season, whose livelihood is destroyed season after season may not see as a magnificent species.

So that is I think where we have to start. That is where we have to find the solution, and that is where a lot of the funds should be allocated onsite right there where it happens every night when the elephants and man get in conflict with each other. And, obviously, as the human populations grow as all of Malaysia is being developed, the forests are shrinking.

And in addition to that, we humans—we provide the elephants with restaurants. We provide them with plants that are juicy, that are sweet, that are everything that we like to eat, and they like it too. So not only do we displace them, instead, we are actually pulling them in many cases into these areas to feed on our crops which adds to the problem of solving the whole issue.

The second point I wanted to make, and it has been discussed quite a bit already, is the question of the domestication of the work elephants out there. A quarter of the population may be in captivity. These guys are not contributing to reproduction. They are almost completely lost to the gene pool of the Asian elephant population.

But still there are those animals that are under our direct control. They are held by us. So if we can make these guys breed, if we can have them reproduce and become active members of the Asian elephant gene pool, we can control one-quarter of their gene pool.

We were invited 2 weeks ago by the Royal Forest Department in Thailand, for example, to help them reintroduce unemployed work elephants. The Thai timber industry is going down the drain as all the value cash timber has been logged out. There were thousands of work elephants employed. These guys are now unemployed. Their owners can no longer maintain them. So what to do?

The first instances have been in the newspapers that elephants are sold to slaughterhouses and slaughtered for meat. Bangkok is

full of elephants bagging in front of the big malls, the big supermarkets—a horrible life in that congested traffic. Other elephants are let loose by their owners. They start raiding the crop fields over there and cause destruction and loss of life.

So here is another big area where we can actually work on thousands of elephants and try and find solutions on how to integrate those guys back into the wild, into the pool of elephants. Thank you.

[Statement of Mr. Stüwe may be found at end of hearing.]

Mr. SAXTON. Thank you very much; very interesting. Dr. Pearl.

**STATEMENT OF DR. MARY PEARL, EXECUTIVE DIRECTOR,
WILDLIFE PRESERVATION TRUST INTERNATIONAL**

Dr. PEARL. In your letter inviting me to speak, Congressman Saxton, you asked me my assessment of the Asian Elephant Conservation Act. You asked whether I think the authorization level is appropriate, the types of conservation projects that are likely to need Federal support, and what other steps could be taken to help save elephants. I would like to comment briefly on each of your queries.

First, my assessment. I think the Act may be key to the survival of Asian elephants. As you have heard earlier, the population is down to 50,000 animals, and what is worse, it is isolated in small pockets spread all the way from India to Indonesia. And because the hunting for tusks is limited to males, because in Asia it is only the males that have the tusks, in some areas the ratio of males to females has been reduced to 1 to 100.

In such circumstances, it is virtually impossible for all potential mothers to mate. Even in the best of circumstances, elephants typically only produce an offspring every 4 to 6 years. Thus, elephant populations will be extremely slow to recover from a steep decline.

Moreover, as you have heard, up to one-third of the population is in captivity, mostly in logging camps. The share of captive animals is growing. As more natural habitat is converted into agricultural lands, the resident elephants suddenly become "agricultural pests," and they are taken into captivity.

As Michael said, the productivity and health of this worldwide captive population is important for the future of the species. Yet, the captive care in many places falls short of minimum standards for humane care. Successful captive breeding must take place, but it cannot in unhealthy circumstances.

It will be necessary to take the hunting for capture pressure off of remaining wild elephants by mobilizing this captive potential. It is clear that active intervention is necessary, both in elephant camps and in the wild to halt the steep decline in elephant numbers.

Now, regarding your second query, I think that the authorization level is appropriate to American interests and values and to the capacity of field researchers and conservationists to respond. In America, elephants are the backbone of zoos and circuses.

In Asia, beyond the elephant's essential role in Buddhism and Hinduism, the continued economic viability of sustainable tropical timber harvesting depends on the maintenance of captive elephant

populations in some rural areas. In Burma, for example, an elephant work force of 3,000 is used to manage the logging industry.

But elephants are critically important not only culturally and economically, but also economically indirectly through their ecological role. They maintain the habitat that other wildlife needs. A host of plants and animals depend on the elephant in its role as the architect of the forest, creating clearings in which they can also live and grow. These healthy ecosystems are the basis of local human health and prosperity.

I would now like to outline some specific projects that must be undertaken to protect elephants, which could be supported under H.R. 1787. Despite the low numbers and the troubles they face, they are not doomed to extinction. The situation is urgent, which is very different from hopeless. We know what we must do to stabilize the population. We must locate and identify all remaining significant local populations of elephants and determine their minimum critical habitat requirements.

We must make plans to translocate isolated elephants to places where they can become part of an effective reproducing local population. We must resolve conflicts where elephants are ruining people's livelihoods in such a way that both people and elephants have viable futures. We must devise ways to better manage captive populations so that they are self-sustaining, humanely cared for, and a source of replenishment for remaining wild herds.

At my organization, Wildlife Preservation Trust International, we have, in fact, begun this work in partnership with the Asian Elephant Conservation Centre in India, thanks to the generosity of our members and various private foundations. And we are also fortunate that throughout the elephant range states, there are competent and committed scientists and wildlife managers ready and willing to work with us to reverse the decline in elephants.

However, the urgency of our mission is such that we cannot accomplish what we need to on private support alone, and that is why H.R. 1787 is so important. Rather than throwing money at the problem, this legislation would direct a modest amount that would bring ongoing efforts up to the needed level of intensity and accomplishment.

In other words, the proposed U.S. contribution to Asian elephant conservation represents leverage appropriate to American interests and values which will result, in fact, in far greater expenditures of funds and effort at the local level within elephant range countries.

So to conclude, the Asian Elephant Conservation Act is important for the future of a species of aesthetic and economic value to Americans. The tasks before us are clear. We have the people in place to make a difference with relatively modest expenditures. Thank you.

[Statement of Dr. Pearl may be found at end of hearing.]

Mr. SAXTON. Mr. Ireland.

**STATEMENT OF ANDY IRELAND, SENIOR VICE PRESIDENT,
FELD ENTERTAINMENT, INC.**

Mr. IRELAND. Thank you, Mr. Chairman. I have submitted a statement, and I would ask your indulgence to put—

Mr. ABERCROMBIE. Excuse me, Mr. Ireland. To think I was just moments from being able to jump in there and introduce you myself, but decorum has been preserved.

Mr. IRELAND. I appreciate that. Mr. Chairman, I represent Feld Entertainment, Incorporated, one of the world's largest and most prominent producers of live family entertainment. While you may not be immediately familiar with the name of the company, I am sure more than a few of the people here today will have seen one of our shows. These include Ringling Bros. and Barnum & Bailey Circus, Walt Disney's World on Ice, and the Las Vegas illusionists Siegfried & Roy.

Four years ago when I retired from Congress, I had the opportunity to run away and join the circus, not just any circus, but literally the greatest show on earth. Needless to say, it is a role I found myself eminently qualified for given my 16 years here in these hallowed halls.

More seriously, the reason we are here today is because all of us in this room and those testifying before you today have a tremendous love and respect for one of nature's most amazing animals, the Asian elephant. The Asian elephant has long been an integral part of the circus experience and is among one of our most beloved and popular animals.

America's relationship with the Asian elephant began over 200 years ago when the first Asian elephant came to this country as part of a traveling exhibition. This has continued through 127 years of history at Ringling Bros. and Barnum & Bailey alone.

As the plight of the Asian elephant became more pronounced, we at Feld Entertainment realized that we had a responsibility to help protect the species, and that we were in a perfect position to make such a contribution. As you know, and has been said here by numerous speakers, roughly one-third of the world's Asian elephant population, nearly 16,000, are domesticated. While the vast majority reside in camps throughout southeast Asia, we at Ringling Bros. maintain the largest herd in the United States and the most diverse gene pool.

Our commitment to conservation of the Asian elephant is based on three goals: education and the accumulation of valuable scientific information from a successful captive breeding program and habitat conservation.

Let me explain how we look at this. As the largest traveling exhibition in North America, over 10 million children of all ages attended Ringling Bros. performance each year. We long ago realized that we have a tremendous opportunity not only to entertain but to educate our patrons, many of whom are young children. I am sure that many of you in this room can remember the first time you saw an elephant, a lion, and a tiger, and the chances are pretty good that was in a circus somewhere.

The impact of live exhibition, especially in an entertainment setting, is tremendous. Common sense dictates and numerous scientific studies have proven the long-term effectiveness of live display and entertainment in both educating and raising the public's awareness of the needs, abilities, and, most importantly, of our responsibility to endangered animals.

In a nutshell, we are well-positioned to educate the public, and we go to great lengths to get the message out. In addition to the educational benefits of public exhibition, Feld Entertainment has made a substantial investment in the future of the Asian elephant through the creation of the Center for Elephant Conservation based in Florida.

The center is a 200 acre state-of-the-art facility dedicated to the breeding, conservation, and scientific study of Asian elephants. To date, nine calves have been born under this program, the most recent addition arriving just last month and weighing in at something over 200 pounds.

Having found ways we could contribute to the conservation of the species in our own backyard through education and successful scientific breeding, we at Feld Entertainment began to look for the element that would make our role complete; that is, the protection of the species in the wild.

Perhaps the greatest challenge facing the future of Asian elephants in the wild is that of habitat preservation, and that is what brings us here today. Dr. Sukumar and others, Mary Pearl and Dr. Maple, have described this problem in detail. I would simply recommend to you that the Asian Elephant Conservation Act is the solution to this critical problem; the piece of the puzzle that completes the picture.

The Federal Government, by helping to identify and provide seed funds for grassroots habitat conservation projects, will provide the vehicle through which conservation-minded organizations such as Feld Entertainment and others here today can make to them in a meaningful contribution to save the Asian elephant. Thank you.

[Statement of Mr. Ireland may be found at end of hearing.]

Mr. SXTON. Thank you all very much for your comments, and perhaps we will do this a little bit differently. The gentleman from California.

Mr. FARR. I would just like to ask—thank you for coming, and it is always a pleasure to have a distinguished former member back in the building. I am interested and one of the priorities you said was habitat conservation as the Feld Entertainment's priorities. Is that the reason why you are supporting this legislation?

Mr. IRELAND. Yes.

Mr. FARR. Because as we heard earlier, none of the money would be spent here in the United States for domestic breeding programs or for all the other—

Mr. IRELAND. Absolutely. The intention of this is in no way for any funds to go to something in the United States. Speaking for Feld, we expect to be a contributor of funds, not only hard cash funds, but in other ways. First of all, we contribute by raising the awareness educationwise that there is a problem out here—in the United States, our own money, our own efforts in our program books and other things.

We think that the \$7 or \$8 million that we spend and have spent on this facility in Florida to breed these elephants and the quite substantial funds for their care and maintenance each year is a contribution we make to saving the Asian elephant in the wild simply because the scientific knowledge that we generate we make available to anybody that wants it.

And, as a matter of fact, I was just recently with Dr. Sukumar in India with the idea of finding out how we can transfer any knowledge that we have. Others have made the point that this one-third of the elephant population that is domestic can in many ways, beyond the breeding that Michael Stüwe talked about and others, make a contribution to saving the wild things. These two things are things that we have done ourselves.

When we educate people about the circus, they come to us and they want to do something. They want to participate, and other organizations want to participate. And the leverage comes from the Federal Government seeding the program and making it possible for people to know where to put their funds and their effort. Nothing in this thing would ever go to anything that we do.

Mr. FARR. Well, I appreciate that because I agree that we ought to be participating with both private and public sectors to enhance the reproduction of endangered and threatened species. And I think we do that best by preserving the habitat. I think you can't do it just by captivity. I don't think that we want to just learn about animals from visiting zoos and circuses.

And I am very much opposed, I think particularly for elephants, of the commercial use and transportation of elephants. I don't agree with the circus's need to have traveling elephants. I think if you want to—you bring people to where the elephants are.

You don't take the elephants to where—you know, they weren't intended to be on earth to be transported on trains and trucks and so on. But that is my own personal feeling, but I do appreciate your comment about putting private sector money into habitat conservation, and I applaud you for that.

Mr. SAXTON. Just let me comment on the gentleman's time or my own, whichever. If it were not for Ringling Bros., Feld Entertainment, and Andy Ireland, we probably wouldn't be here today. This effort started when Andy Ireland came to visit Neil Abercrombie and Jim Saxton and Harry Burroughs 6 or 8 months ago. And the effort that he has put into getting us here today has been phenomenal.

And I have not been able to uncover or see a single thing here that economically benefits the circus or Feld, and I appreciate that. I mean, we are looking to form partnerships with those in private enterprise who can help to multiple whatever moneys we may end up appropriating and leverage those moneys. And I, for one, am most appreciative of the effort that former Congressman Ireland and his associates have brought to this effort. Mr. Abercrombie.

Mr. ABERCROMBIE. Dr. Stüwe, I would like to know, and perhaps, Dr. Pearl, you have expertise in this as well—I would like to know what basis do you have for believing, if I understood you correctly, that domesticated elephants could be reintegrated with wild elephants in terms of expanding the genetic pool?

Did I understand you both correctly that because of the domesticated elephant situation—I mean, this is what we are dealing—the real world is that a large proportion of the existing Asian elephants are in a domesticated state.

The testimony has been that as a result of something I mentioned earlier in my commentary and questions, that is, the clash between human beings and Asian elephants in the contemporary

Asian world, that the domesticated part of it may be historically at an end or approaching an end—the traditional uses as a result of domestication. Now, is there any studies or activities which have already proven that this can happen, or is this just a supposition or a proposal or what?

Dr. PEARL. I guess we can both answer, but it may surprise you to know that the captive/wild division isn't as clear-cut as you might think. In many well-run elephant camps, females are released at night to go into forests where they mate with wild bulls, and in this way genes are exchanged between the wild and the domestic population.

Mr. ABERCROMBIE. So this is, I take it, random activity for the time being?

Dr. PEARL. Oh, I am sure the females chose the healthiest males; it's not random.

Mr. ABERCROMBIE. I wasn't referring to individual romance, but I meant in terms of, in other words, those who may have used domestic elephants, obviously, want to have little elephants to come along too probably. But that may not be the case, but what I am interested in is is this the case then that this would not be a difficulty? If we were able to start a program which would be gradually—is the ideal—let me start over again. Is the idea, Dr. Stüwe, from what you said that eventually many of the domesticated elephants would be reintegrated into natural habitat and reintegrated into families, tribes, groups which currently exist in the wild?

Dr. STÜWE. If it is at all possible. It is an extremely tricky problem that we are facing here. The study that I mentioned to which we contribute in Thailand is selecting an area that had elephants previously and due to poaching or whatever happened that captures this elephant is now completely empty of elephants. It is suited for them.

And the Queen of Thailand has just purchased three former work elephants who had become unemployed whose owners could no longer maintain them, and we are now trying to see what happens if they are integrated back into the wild.

Mr. ABERCROMBIE. So this is the kind of thing then that perhaps if this legislation passes and we are able to get funding that we could experiment with. We don't necessarily know the outcome.

Dr. STÜWE. Right, exactly.

Mr. ABERCROMBIE. That is the answer. Is that correct?

Dr. STÜWE. Through research find out does it work, does it not work. If it works, hey, we may have a solution to repopulate empty areas. That is exactly right.

Mr. ABERCROMBIE. Then I am also taking from this testimony that you have given that we may need to find or help to promote habitat in which domesticated Asian elephants may be introduced into that—introduced as groups. Is it possible? Are those domesticated elephants in any kind of groups, or have they been isolated and individualized?

Dr. STÜWE. Right. Those are extremely important questions. The one question that you just asked, the important thing is is there still a social structure within that group of work elephants that we can release together, or do we first have to try and form a new social group and train them for release into the wild.

Imagine these guys don't have any fear of humans. They possibly look for humans. They look for crop fields. And the first thing they do, they start raiding them. So you are creating problems rather than solving them. So there is a big research effort that has to go in how can I pretrain work elephants for release into the wild to then integrate in social——

Mr. ABERCROMBIE. OK. I won't go further with this right now other than to say, Mr. Chairman, obviously, I am coming at this as a layperson, but I am trying to immerse myself in it as much as I can. One of the things I have concluded is is that we have to be very much concerned about the domesticated population and what will transpire with that. I have no answers, obviously. Now, I have all questions at this stage. But I do believe that that is something we are going to have to concentrate on in the future.

My guess is is that the role for domesticated Asian elephants will diminish relatively rapidly—the social role that they now play, the economic role they now play—and that, therefore, we will have to work, provided we can get the legislation on the books in the first place, to see what we do with that population in the various regional and habitat context that they face as manifested on these maps that have been given to us. So that may be a big program.

Dr. STÜWE. If I may add, even though it is red, one more quick item exactly related to that problem. Right now the Burmese timber industry is the most active. Most of the elephants are actually employed there and working. But we have access to trained work elephants, both in Indonesia, where they are caught from the wild and put into camps which someone may describe even as elephant concentration camps, or the Thai elephants who have lost employment.

So here we are potentially talking about the option of shipping elephants between countries from unemployment situations into employment situations. That may have an impact on the interpretation of CITES. Are these elephants allowed to be shipped across to be employed in commercial activities there?

Dr. PEARL. We also have the option of converting the elephants trained to work in logging to working in ecotourism, as was discussed earlier, as another potential——

Mr. ABERCROMBIE. This is the last point on that. With the lumber, the eventual purchaser of the lumber, finished and otherwise, is the West, is it not—mostly in the West?

Dr. STÜWE. Japan.

Dr. PEARL. Japan.

Mr. ABERCROMBIE. OK—same thing.

Mr. SAXTON. Thank you very much, Neil. And, Dr. Stüwe and Dr. Pearl and Andy, thank you very much for the very important job that you have assisted with here and your efforts have been greatly appreciated. You were instrumental in helping us to get the bill introduced. You have been instrumental in helping us to understand why it needed to be introduced and the subject areas that are all related to it. And we appreciate your input very much.

I would just like to say in closing, I don't know whether it was Neil or Mr. Farr that was talking so much about tourism and how interesting it is to see how various forms of wildlife draw tourists,

and I can't help but think of the many tourists that come to this town because we have not one zoo but two.

Mr. ABERCROMBIE. Mr. Chairman, on that note, if I could just have a moment's more indulgence, I do want to finish this question. I don't want to forget it. Has there been any interest in Japan then in helping with this issue? And if there has not been, are there societies or groups or perhaps branches of the Preservation Trust Fund or wildlife funds in Japan?

The reason I bring that up is is I am very concerned in trying to draw other countries in to help us with this, that if we are the recipients particularly of finished products that come out of, you know, logging and other things that take place, then those countries that are the recipients of that should be concerned about what happens with the Asian elephant. And we would have a legitimate basis for asking them to help us—may become associated. Are they presently involved at all? Do any of you know?

Dr. PEARL. Well, sure. JICA, Japan's overseas agency, has funded education centers and help for material assistance in the wildlife departments.

Mr. ABERCROMBIE. Is that a government entity?

Dr. PEARL. Yes, it is. It is the equivalent of U.S. Aid.

Mr. ABERCROMBIE. So there is an institutional framework available in Japan and perhaps other nations with which we could coordinate—which the Department of Interior could coordinate?

Dr. PEARL. Yes. We are leaving my area of expertise, which is in science. But from working in the field, I see that there are some forms of assistance—

Mr. ABERCROMBIE. Just as long as we have an entree point is what I am asking.

Dr. PEARL. Well, I would like to make another brief point. Five million dollars a year really is dwarfed by the amount of money already being spent by the Malaysian Government, the Indian Government, and the Indonesian Government. They are having to compensate farmers for damage elephants do to crops. They are paying costs of translocations. They are underwriting some research. So I think the money that would come through this legislation is very strategic funding for the scientific research needed and to get some model programs going that would leverage further activity in the—

Mr. ABERCROMBIE. I understand. I quite understand. The reason I asked the question and begged the indulgence of the Chair just a moment longer was it is important for us to be able to make clear to our colleagues that we are not pioneers out on the point on this, but rather we would be working on an international basis with others who are interested, including indigenous governments and peoples, and that we could provide then a strategic contribution.

Dr. PEARL. Yes.

Mr. ABERCROMBIE. Thank you.

Dr. PEARL. And European sources.

Mr. IRELAND. Mr. Chairman and Congressman Abercrombie, if I could add to that, we play a number of our shows in Japan. We have had one of our circuses in Japan. The Asian elephant is revered in Japan, as elsewhere in Asia. The strength of the children interest is there, just like America.

The companies that we do business as we put on ice shows and other entertainment there are companies that would certainly be interested, we would say, in the leverage factor of this legislation—a key part of this leverage was the word that Mary Pearl used. That is the catalyst to getting the private sector in there and bringing it up to speed. Japan is, in my judgment, a good candidate for the private sector help.

Mr. SAXTON. Thank you very much, Andy. Mr. Farr I believe has one final, short closing thought.

Mr. FARR. Yes. In closing, you are to be commended for having this hearing at a time when we are discussing the foreign ops appropriation. I mean, you find, you know, a big debate on whether we ought to insure American businesses going abroad.

I think that what we are talking about here is essentially a global economy where you pointed out that people come to this town to watch the zoos, and I would submit that there is probably one of them here that is of the two that you were referring to that is more humane than the other. And we are not sitting in the one that is the most humane.

But Megatrends pointed out that the biggest growth in American ecotourism is watchable wildlife. There are more people looking at wildlife in America than all of the professional sports. And if you think what commercialization there is for that that we are really investing in our future in an economic sense, not just in preserving, you know, the environment.

And it makes smart economics, and it is a time when everybody is going to criticize the fact of what is Congress doing putting \$5 million into Asian elephants somewhere else. And I think that we need to defend that, that that is just as important as backing up American businesses that are going overseas.

So I appreciate all of the effort today. We saw, you know, non-profits and government and for-profit companies all standing in unison. And when we get criticized, I hope you will respond equally particularly from the private sector that this is a worthwhile use of taxpayer dollars. Thank you, Mr. Chairman.

Mr. SAXTON. Thank you very much and thank all of you very much. This hearing is adjourned.

[Statement of Wildlife Institute of India may be found at end of hearing.]

[Whereupon, at 11:55 p.m., the Subcommittee was adjourned.]

STATEMENT OF MARSHALL P. JONES, ASSISTANT DIRECTOR FOR INTERNATIONAL
AFFAIRS, U.S. FISH AND WILDLIFE SERVICE, DEPARTMENT OF THE INTERIOR

Thank you, Mr. Chairman, for giving me the opportunity to provide the U.S. Fish and Wildlife Service's assessment of H.R. 1787, The Asian Elephant Conservation Act of 1997. On behalf of the Administration, the Service fully supports the enactment of this legislation and congratulates the Congress on its foresight in recognizing and addressing the plight of the Asian elephant.

Briefly, I would like to discuss the needs of the Asian elephant and the ability of the Service to handle implementation of the Act and to administer the Asian Elephant Conservation Fund. In addition, I would like to provide information on the capabilities and commitment of Asian countries to protect this species and their habitat, as well as what additional steps could be taken to support the implementation of the Act.

From the first appearance of a fairly small tapir like mammal in what is now Egypt 45 million years ago, elephants evolved a number of species which at one time inhabited nearly every continent. By the end of the Pleistocene glaciation about 10,000 years ago, however, only two species survived—the Asian elephant (*Elephas maximus*) and the African elephant (*Loxodonta africana*). As the largest land animals and as the ultimate symbols of power, elephants have always been viewed by humans with a mixture of awe and fear, commanding respect by their great size but also being viewed as a dangerous and sometimes difficult neighbor.

However, elephants also have other, more intangible values. In Asian cultures in particular, people have embraced the Asian elephant as a treasured partner in life, deified and venerated it into their culture and religion, trained it for hunting and war, and bonded with it at the most basic level. Today, the Asian elephant is also a keystone species for the preservation of biological diversity, since habitats which support wild elephants also provide a home for a vast array of other species, large and small, and thus also is a magnet for ecotourism.

Nevertheless, despite these acknowledged values, the Asian elephant also suffers from a series of paradoxes. Because it is the elephant species usually seen in zoos and circuses, with more than 16,000 animals in captivity, it may be more familiar to the average American citizen. Yet its status is generally less well known by the media and the general public than that of its larger cousin in Africa. With all of the publicity about the decline of the African elephant, they are still more than ten times more numerous than the Asian species, which now numbers only 35,000 to 45,000 animals. The story of the dramatic decline of the African elephant, primarily from large scale poaching is well known. The dramatic decline of Asian elephant numbers due to the ever increasing population of the Asian continent is relatively undocumented.

The Asian elephant must share its habitat with some of the largest and poorest human populations in the world. The combination of pressures on the environment brought on by these conditions has resulted in the conversion of forest cover to agriculture and villages, fragmenting elephant habitat and populations. It is believed that today there are only about ten populations with over 1000 elephants, with half these located in India. The majority of remaining populations are small, with less than 100 elephants each and some with lone bulls.

The dynamics of human population growth have inevitably led to increasing conflicts between humans and elephants. This is not a new phenomenon, but as the competition for the same resources grow, people's tolerance for elephants has dropped. Asian peoples have captured elephants for almost 5,000 years for training for work-associated tasks, religious ceremonies, and war. Where people once revered the elephant and tolerated the occasional crop raiding and destruction, now they are striking back, unfortunately often with lethal results.

Unlike African elephants, Asian elephants have not traditionally been threatened by poaching for the ivory trade, perhaps because females are tuskless and only 60 percent of the males carry tusks. However, recent trends since 1994 indicate that poaching for ivory, as well as for meat, is on the upswing, especially in southern India. The proportion of sub-adult and adult tuskers in various populations over the last 20 years has dropped dramatically, in some areas by as much as 75 percent. In one outstanding example, investigations in 1994 revealed that out of 1000 elephants in Periyar Tiger Reserve, one of the strongholds for elephants in India, only five adult males were left. Even among these, only two were tuskers. This preferential decrease in the number of tuskers indicates increased poaching pressure for their ivory.

The implications of this marked sexual disparity have yet to be assessed. But it is obvious that it will result in changes in population structures, not only among adults but among sub-adults and juveniles. A drastic reduction in fertility has al-

ready been seen which will affect the long term demographic structure of this population. Similar effects have been well documented in African elephants which have been subject to heavy poaching; and even if poaching is brought under control, it may take years for normal birth rates and juvenile survival to be restored.

In recognition of these threats, the Asian elephant has been accorded the highest levels of legal protection through national laws and international treaties. It is listed as "Endangered" under the U.S. Endangered Species Act and on the TUCN—World Conservation Union Red List, and on "Appendix I" of CITES. Most of the thirteen Asian elephant range countries, including India, reinforce these international listings with domestic laws of their own. CITES listing, which is designed to eliminate the world-wide trade in ivory, has been partially successful. However, some illegal ivory obtained from poaching continues to move from country to country. Many Asian countries have the strong desire to reduce the levels of poaching and stop all illegal trade, but they need assistance if they are to improve their ability to enforcement the CITES controls.

In addition, while national legislation has afforded the elephant with maximum protection on paper, local conditions often serve to make this safety net more illusory than real. Forests in many areas can be owned by local District Councils or private individuals and subject to uncontrolled slash and burn, shifting cultivation, leading to disappearance of prime elephant habitats. Erratic economic and political situations as well as lack of emphasis on wildlife-related crimes have made it difficult for some countries to effectively enforce laws and to efficiently manage their elephant populations and other natural resources.

For these reasons, the Asian elephant is in trouble—and it will take more than legal paperwork to ensure its survival. Asian elephants need active protection and management of their habitat, resolution of the deleterious conflicts with humans over land uses, better law enforcement activities to protect against poaching, reduction of captures from the wild, and better care and humane treatment of the remaining captive populations. They also need the restoration of the harmonious relationship that previously existed with humans through community education and awareness activities.

Given the already endangered status of the Asian elephant and the new and insidious threats now facing it from the factors described above, it is indeed timely that this Subcommittee is now considering H.R. 1787, the Asian Elephant Conservation Act of 1997. This Act acknowledges the problems of forest habitat reduction and fragmentation, conflicts with humans, poaching and other serious issues affecting the Asian elephant. The Act addresses the need to encourage and assist initiatives of regional and national agencies and organizations whose activities directly or indirectly promote the conservation of Asian elephants and their habitat, and it provides for the establishment of an Asian Elephant Conservation Fund, authorized to receive donations and appropriated funds. While many range governments have demonstrated a commitment toward conservation, the lack of international support for their efforts has been a serious impediment.

Patterned after the African Elephant Conservation Act of 1988 and the Rhinoceros and Tiger Conservation Act of 1994, the Asian Elephant Conservation Act would assign responsibility for implementation to the Secretary of the Interior, in consultation with the Administrator of the Agency for International Development. The bill would authorize the Secretary to make grants designed to benefit Asian elephants in the world.

The Service would also mesh the administration of this new legislation with our existing responsibilities under the Endangered Species Act, using our experience gained during more than twenty years of participation in cooperative wildlife programs in Asia—including, among many other projects, a ten-year ecological study of the Asian elephant in India involving training, research, and management activities.

Additionally, the Service has facilitated CITES implementation workshops in six Asian countries, and has so far provided support for 15 projects under the Rhinoceros and Tiger Conservation Act in three countries, with many more proposals now under review. The Service has developed an excellent working relationship with most Asian elephant range countries and with the CITES Secretariat, as well as establishing an important network of worldwide experts, advisors and cooperators that can be drawn upon for support and expertise.

Implementation of the Asian Elephant Conservation Act by the Service would be based on the pattern established by the African Elephant and Rhinoceros and Tiger Conservation Acts. The Service would develop a grant program with a call for proposals that would be sent out to a mailing list of potential cooperators from regional and range country agencies and organizations, including CITES partners and the CITES Secretariat. The Act's criteria for proposal approval gives the Service clear

guidance, and priority would be given to proposals which would directly support and enhance wild elephant populations and which include necessary matching funds.

All amounts made available through the Conservation Fund would be allocated as quickly and as efficiently as possible. We expect that Asian elephant range countries and international organizations would submit a variety of conservation proposals for support, including research, management, conflict resolution, community outreach and education, law enforcement, CITES implementation, captive breeding, genetic studies and traditional mahout and koonkie elephant training.

Given the success under the African Elephant Conservation Act and the Rhinoceros and Tiger Conservation Act, we expect that the Asian Elephant Conservation Act would make a major contribution to conservation, filling a significant void in our current programs. It would send a strong message to the world that the people of the United States care deeply about Asian elephants and that the U.S. Government is committed to helping preserve this keystone species of the remaining tropical and subtropical Asian forests.

For these reasons, Mr. Chairman, we urge this Subcommittee to give favorable consideration to H.R. 1787, the Asian Elephant Conservation Act of 1997.

STATEMENT OF TERRY MAPLE, PH.D., PRESIDENT/CEO, ZOO ATLANTA, & PRESIDENT-ELECT, AMERICAN ZOO & AQUARIUM ASSOCIATION, (AZA)

Mr. Chairman and Members of the Subcommittee:

Thank you for the opportunity to appear here today. I am Dr. Terry Maple, President and CEO of Zoo Atlanta in Atlanta, Georgia, and President-Elect of the American Zoo and Aquarium Association (AZA). On behalf of AZA and its members, I want to express my appreciation for the concern and interest that the Chairman and this Subcommittee have historically shown for the conservation of threatened and endangered species. I would especially like to thank the Chairman and Congressman Abercrombie for introducing H.R. 1787, and thank the Subcommittee members who have cosponsored this bill. The AZA strongly supports this legislation.

The AZA represents virtually every professionally operated zoological park, aquarium, oceanarium, and wild animal park in North America, as well as 6500 individual members. More than 119 million people visit the AZA's 180 zoos and aquariums each year, more than attend all professional baseball, basketball, football, and hockey games combined.

In 1988, this Subcommittee recognized the serious threat the African elephant faced from poaching and loss of habitat by strongly supporting the African Elephant Conservation Act (AECA). While the Act's imposition of a ban on the importation to the United States of African ivory was important, the establishment of the African Elephant Conservation Fund has made the Act critical to the survival of the species. This Fund is the only continuous source of money (matching) to assist African countries and organizations in their conservation efforts to protect and manage these magnificent creatures. The Fund has supported over 50 conservation projects in seventeen range states to enhance habitat protection—anti-poaching equipment for example—which has helped increase the elephant populations in many regions of southern Africa.

Regrettably, the Asian elephant is now in need of similar help. It faces serious threats—not just from ivory poaching, but from a greater threat, the loss of habitat due to a rapidly expanding human population throughout its range.

By creating the Asian Elephant Conservation Act and its subsequent Fund, the United States will have the opportunity to once again demonstrate its leadership and commitment to wildlife conservation. The Asian elephant is a flagship species for the tropical forests of Asia; securing its long-term viability will in turn assist in the conservation of tigers, rhinoceros, Asiatic wild dog, gaur, green peafowl, kouprey, pheasants, clouded leopards, Malayan sunbears, lion-tailed macaques, and gibbons.

Unlike the African elephant, whose populations range between 600,000 to 700,000 animals, the Asian elephant population only numbers between 35,000 to 45,000 animals. Furthermore, the population is highly fragmented throughout thirteen countries; only in four areas does the population consist of more than 1,000 animals. Its range once stretched widely from Iraq through the Indian subcontinent to China. Today, it can no longer be found in West Asia.

Ironically, for over 4,000 years, this species has enjoyed a unique relationship with humankind in Asia. Elephants serve as an element in certain religious ceremonies, and function in the region's forestry operations. However, because of the serious need to feed the continent's expanding population, people are no longer tolerating incidents of crop-raiding. Resolving the growing friction between humans and

elephants will require flexibility and long-term commitment—two tools offered by the Act.

The goals of the Act and its subsequent fund would be the following: (1) protection of the remaining elephant populations and their habitat; (2) establishment and management of specially protected areas; (3) reduction of captures from the wild, most notably in Burma; and (4) promotion of effective community enforcement programs.

H.R. 1787 would focus on remedies that address human/elephant conflict resolution. That is a difference from the focus of the AECA which focuses on trade-related aspects of conservation. The Act would give support to projects that accomplish one or more of the following: (1) directly promote wild elephant management practices; (2) monitor population trends; (3) assess annual ranging patterns of known populations; (4) enforce CITES; (5) encourage law enforcement through community participation; (6) translocate elephants; and (7) conduct community outreach and education.

Today, AZA institutions exhibit 155 Asian elephants. Asian and African elephants are magnificent animals that are difficult to exhibit, manage, and breed. They have complex social structures—at times rivaling those of humankind—and are extremely intelligent.

As important as it is for our institutions to conduct research on and educate our visitors about the life patterns of the Asian elephant, it is as equally important that resources be made available to protect the wild Asian elephant populations in its habitat.

In summary, AZA strongly believes H.R. 1787 should receive the full support of this Subcommittee for the following reasons:

- it will provide competitive financing where it is needed most—in the wild to support protection, conservation, and management of threatened Asian elephants;
- it is focused and cost-effective, yet flexible enough to address immediate needs for conservation;
- it will encourage donations from private sources—a fine example of a public-private partnership; and
- funding requests will be based on sound science.

Thank you for the opportunity to testify before you today in support of H.R. 1787.

STATEMENT OF RAMAN SUKUMAR, CHAIRMAN, IUCN/SSC ASIAN ELEPHANT
SPECIALIST GROUP

The Asian elephant, which has shared a special bond with people since time immemorial, now faces an uncertain future. It has steadily declined in most of its range states in Asia to a population of below 50,000 in the wild and about 15,000 in captivity, a level which is under 10 percent of that of the African elephant. Loss of habitat, capture of elephants for domestication, and poaching for ivory and meat are the major causes for the decline of the species in recent decades. Dedicated conservation efforts, backed by adequate financial support, are needed to reverse these trends and ensure the long-term conservation of the species.

The elephant was first tamed in the Indian sub-continent about 4000 years ago. Since then it has carried our heaviest burdens and fought innumerable battles. Kings have used the elephant both as a machine of war and an ambassador of peace. It is worshipped by Hindus in the form of Ganesha, the elephant-headed god, while the Buddha himself is considered to be the reincarnation of a sacred white elephant. No other relationship between man and beast equals the splendour of the elephant-human relationship.

A species which once ranged widely from the Tigris–Euphrates basin in West Asia eastward to the Yangtze river and beyond in China, is now confined to the Indian sub-continent, southeast Asia and some islands in Asia. Of the estimated wild population of 50,000 elephants, about 50 percent is found in a single country, India. Other important populations are seen in Burma (5000-6000), Indonesia (2800-4800), Sri Lanka (2500-3200), Thailand (1500-3000) and Malaysia (1000-1500). Its status is unclear in potentially important countries such as Laos, Cambodia and Vietnam, although it is known that elephants are in relatively low numbers. Elephant populations in China, Bangladesh, Bhutan and Nepal are relatively insignificant.

There are several causes for the decline of the elephant in Asia. In many countries the loss and fragmentation of habitat due to expansion of cultivation, settlement and developmental projects have squeezed elephant populations into small, unviable areas. Indonesia, for instance, has a transmigration scheme for resettlement of people from the island of Java into Sumatra. The diversion of forest land

for settlement and agriculture has severely fragmented the habitat, such that there are believed to be over 40 distinct elephant populations on the island. The story is similar in peninsular Malaysia, where the rapid conversion of natural forests to plantations of rubber and oil palm has isolated elephant herds.

The loss of forest to agriculture occurs in a different context in northeastern India and countries such as Burma, Laos and Cambodia. Here, slash-and-burn shifting cultivation on hill slopes has denuded forest cover considerably. Vast areas are permanently devoid of forest cover because of short rotation periods of shifting cultivation. In southern India, developmental projects such as dams, roads, railway lines, mines and commercial plantations of tea and coffee have made considerable inroads into hill forests and fragmented the habitat. In Sri Lanka, the Mahaweli Ganga Project, a series of dams and agricultural development, has begun to compress elephant populations.

Fewer than 10 populations, 6 of them in India, have over 1000 elephants each, a level needed to ensure its long term viability. The majority of populations have much fewer numbers, often less than 100 or 50 elephants each, which are not viable even in the short term.

The second major cause for the decline of the elephant is its capture and killing in large numbers. During the past century alone, up to 100,000 elephants have been captured in Asia. Although most countries have officially stopped any large scale capture of elephants, some illegal captures still continue in southeast Asia. However, it is now certain that the extremely low densities and numbers of elephants in many southeast Asian countries, particularly the Indo-China region, is due to hunting of elephants for ivory, meat, skin and other elephant products. The precise magnitude of hunting impacts is not known because of lack of investigations in these countries. The ready availability of elephant products, including ivory and hide, in markets of these countries certainly testifies to the severity of the problem.

Equally if not more important is the consumer demand for elephant products such as ivory from East Asian nations, in particular Japan. A new wave of elephant poaching is sweeping through Asia, affecting countries such as India. Here, the selective poaching of male elephants for tusks has caused serious imbalances in the population structures. The ratio of male to female elephants has skewed considerably in many populations in southern India; in one major population there is only one adult male for every 100 adult females. As the number of male elephants declines, and sex ratios become more unequal, genetic variation is lost to the detriment of the population.

A socio-economic dimension to the problem of conserving elephants is the impact of elephants on humans and their crops and property. As habitats become fragmented and elephant get compressed, there is escalation of crop depredations and manslaughter by elephants. In India alone over 200 people are killed by wild elephants each year, often when elephants enter crop fields and settlements at night in search of forage. The economic losses to crop damage by elephants run into several million dollars annually in the Asian countries. In Malaysia the losses to commercial rubber and oil palm plantations reached such levels that they prompted the expression "the million dollar white elephant." In a region undergoing rapid socio-economic transformation, the traditional tolerance of farmers toward the elephant is disappearing.

The coming century will decide the ultimate fate of the Asian elephant and other creatures on this earth. Fortunately with the elephant, the problems have been well identified and solutions available to ensure its survival and long term conservation. Basically, there are four major aspects to the conservation of the elephant. These are:

- (1) Maintaining viable, contiguous habitats of high quality through setting up of networks of protected areas.
- (2) Minimizing elephant-human conflicts through appropriate measures.
- (3) Controlling the poaching of elephants for ivory and other products.
- (4) Managing the large numbers of captive elephants through proper health care, training, breeding and use.

Although the task is enormous, given the wide geographical spread of the species, there is urgent need to consolidate upon and expand the scope of various conservation projects being carried out on a small scale. India's Project Elephant is one model which can be adapted for other Asian countries. There is urgent need to impart training and transfer technical expertise to personnel in many Asian countries.

Over the past two decades, the Asian Elephant Specialist Group has been the most active player in elephant conservation efforts in Asia. The basic details of the status and distribution of the elephant have been pieced together through the work of its members. An Action Plan for the Asian Elephant was published by the group in 1990. Several studies of fundamental importance to the conservation of the ele-

phant have been undertaken or are in progress. The considerable achievements of the AESG and other organizations and institutions have been made with very modest funding. The time has come to implement the conservation strategies which have evolved over the years. This calls for much higher levels of funding from the international community.

The irony that I see in the plight of the Asian elephant is that it is arguably the ultimate flagship species for conservation of biological and cultural diversity in Asia. The elephant is a keystone species in the tropical forests of south and southeast Asia, which are biologically one of the most diverse regions in the world. Conserving the wild elephant would automatically ensure that hundreds of thousands of plant and animal species would also be conserved in Asian tropical forests. The proper care and management of captive elephants would ensure that elements of the rich cultural heritage of this region would be preserved. We surely have a responsibility to saving the most magnificent of our fellow creatures.

STATEMENT OF MARY CORLISS PEARL, PH.D., EXECUTIVE DIRECTOR, WILDLIFE
PRESERVATION TRUST INTERNATIONAL

My name is Dr. Mary Pearl, and I represent Wildlife Preservation Trust International, a U.S.-based wildlife conservation organization. At WPTI, we seek to save endangered species from extinction through projects in collaboration with local scientists and educators. We work primarily in areas where there are human population pressures, human-wildlife conflicts, highly diverse or unique ecosystems, and where hands-on efforts are needed for animal survival. We integrate methods from captive breeding and reintroduction to veterinary care, public education, and wildlife research. We have no higher priority than the conservation of the elephant.

Elephants are marvels of nature: their size is awesome—they can stand over twelve feet tall and weigh over 15,000 pounds. One elephant molar can weigh ten pounds, and the amazing elephant trunk contains at least 150,000 muscles, enabling it to uproot a tree or lift a small coin. Elephants are intelligent and emotional and inextricably entwined in human history. Four thousand years ago, elephants were used to carry burdens. Elephants were used in battle by King Porus against Alexander the Great, by King Pyrrhus over the Romans, and during the Vietnam War. Humans use elephants to log forests, transport loads, carry tourists through parks and religious relics to temples. Elephants, unlike any machinery, can maneuver in mountainous, inaccessible terrain, through water and forests with minimal environmental impact. In the United States, circus and zoo elephants have inspired awe, respect, and affection for generations.

Despite this heroic history, both the Asian and African elephant species are facing tremendous pressure toward extinction. In Africa, the chief culprit has been poaching for tusks for the ivory trade. In Asia, where only a portion of adult males grow tusks, the main problem is habitat loss. Since the early 1980's, the African population has fallen 50 percent, to an estimated 600,000 animals. This steep decline has been halted to some degree by the worldwide ban on ivory trade, and by improved, internationally coordinated law enforcement.

The Asian elephant is not as fortunate. Perhaps because habitat loss is relatively slow and quiet compared to the drama of violent gangs of poachers, the constant decline in elephants in Asia has continued without much world notice. Yet today, the worldwide population of Asian elephants is down to fewer than 50,000 animals, isolated in small pockets in India, Myanmar, Sri Lanka, China, Thailand, Laos, Cambodia, Malaysia, Indonesia, and Vietnam. Because hunting for tusks is limited to males, in some areas the ratio of males to females has been reduced to one to one hundred. In such circumstances, it is virtually impossible for all potential mothers to mate. Even in the best of circumstances, elephants typically only produce an offspring every four to six years, so that elephant populations are extremely slow to recover from steep decline. Moreover, up to one-third, or 15,000 of the world's Asian elephant population lives in captivity, mostly in logging camps. This share of captive animals is growing: as more natural habitat is converted into agricultural lands, the resident elephants become "agricultural pests" and are taken into captivity. The productivity and health of the worldwide captive population of elephants is important for the future of the species. Yet much captive management falls short of minimum standards for humane care, and successful captive breeding cannot take place, although it will be necessary to take the hunting pressure off of remaining wild elephants.

The endangered status of Asian elephants is especially poignant because for thousands of years, they have lived in close association with humans, as an integral part of religions and cultures. Yet beyond their essential role in Buddhism and Hindu-

ism, elephants are essential in traditional forest management systems in many parts of Asia, and the continued economic viability of sustainable tropical timber harvesting depends on the maintenance of captive elephant populations. In Myanmar, an elephant work force of 3,000 is used to manage the logging industry. Elephants are critically important not only culturally and economically, but also ecologically, in that they maintain habitat that other wildlife needs. A host of plants and animals depend on the elephant, which as “the architect of the forest,” creates clearings in which they can also live and grow.

Despite the low numbers of Asian elephants and the troubles they face, they are not doomed to inevitable extinction. While the situation of the Asian elephant is urgent, it is certainly not hopeless. We know what we must do to stabilize the population. We must locate and identify all remaining significant local populations of elephants, and determine their minimum critical habitat requirements. We must make plans to translocate isolated elephants to places where they can become part of an effective, reproducing local population. We must resolve conflicts where elephants are ruining people’s livelihoods in such a way that both people and elephants have viable futures. We must devise ways to better manage captive populations so that they are self-sustaining, humanely cared for, and a source of replenishment for remaining wild herds.

At WPTI, we have begun this work in partnership with the India-based Asian Elephant Conservation Centre, thanks to the generosity of our members and of various private foundations, including the John D. and Catherine T. MacArthur Foundation, the Liz Claiborne/Art Ortenberg Foundation, and the Chase Wildlife Foundation. We are fortunate that throughout the Asian elephant range countries, there are competent and personally committed scientists and wildlife managers ready and willing to work with us to reverse the decline in elephants. However, the urgency of our mission is such that we cannot accomplish what we need to on private support alone. That is why H.R. 1781, the Asian Elephant Conservation Act, is so important. Rather than “throwing money at the problem,” this legislation would direct a modest amount that would bring ongoing efforts up to the needed level of intensity and accomplishment. In other words, the proposed U.S. contribution to Asian elephant conservation represents leverage appropriate to American interests and values, which will result in far greater expenditures of funds and effort at the local level, within elephant range countries.

Asian elephants are an international treasure, for aesthetic, cultural, economic, and ecological reasons. Our world would be diminished and Asian forests would deteriorate without these magnificent creatures. Saving the beloved elephant is a more compelling goal than the abstract notion of forest protection, and therefore attention to this flagship species is a compelling means to preserve the wild lands we all need for the health of the biosphere. WPTI is fortunate that several private foundations and our membership have helped us conduct preliminary work needed to reverse the recent decline in elephant numbers. However, the situation is urgent, and our financial resources are stretched to the limit. The additional assistance that the Asian Elephant Conservation Act would provide would allow the international conservation community to move much more quickly in what is truly a race to save the Asian elephant.

105TH CONGRESS
1ST SESSION

H. R. 1787

To assist in the conservation of Asian elephants by supporting and providing financial resources for the conservation programs of nations within the range of Asian elephants and projects of persons with demonstrated expertise in the conservation of Asian elephants.

IN THE HOUSE OF REPRESENTATIVES

JUNE 4, 1997

Mr. SAXTON (for himself, Mr. ABERCROMBIE, Mr. YOUNG of Alaska, Mr. MILLER of California, Mr. BOEHLERT, Mr. COOK, Mr. CUNNINGHAM, Mr. EHLERS, Mr. FALCONE, Mr. FRANKS of New Jersey, Mr. GILCHREST, Mr. GREENWOOD, Mr. HINCHEY, Mrs. KELLY, Mrs. MORELLA, Mr. OLVER, Mr. PALLONE, Mr. UPTON, and Mr. TRAFICANT) introduced the following bill; which was referred to the Committee on Resources, and in addition to the Committee on International Relations, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

A BILL

To assist in the conservation of Asian elephants by supporting and providing financial resources for the conservation programs of nations within the range of Asian elephants and projects of persons with demonstrated expertise in the conservation of Asian elephants.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

1 **SECTION 1. SHORT TITLE.**

2 This Act may be cited as the “Asian Elephant Con-
3 servation Act of 1997”.

4 **SEC. 2. FINDINGS.**

5 The Congress finds the following:

6 (1) Asian elephant populations in nations with-
7 in the range of Asian elephants have continued to
8 decline to the point that the long-term survival of
9 the species in the wild is in serious jeopardy.

10 (2) The Asian elephant is listed as an endan-
11 gered species under section 4 of the Endangered
12 Species Act of 1973 and under appendix I of the
13 Convention on International Trade of Endangered
14 Species of Wild Fauna and Flora.

15 (3) Because the challenges facing the conserva-
16 tion of Asian elephants are so great, resources to
17 date have not been sufficient to cope with the con-
18 tinued loss of habitat and the consequent diminution
19 of Asian elephant populations.

20 (4) The Asian elephant is a flagship species for
21 the conservation of tropical forest habitats in which
22 it is found and provides the consequent benefit from
23 such conservation to numerous other species of wild-
24 life including many other endangered species.

25 (5) Among the threats to the Asian elephant in
26 addition to habitat loss are population fragmenta-

1 tion, human-elephant conflict, poaching for ivory,
2 meat, hide, bones and teeth, and capture for domes-
3 tication.

4 (6) To reduce, remove, or otherwise effectively
5 address these threats to the long-term viability of
6 populations of Asian elephants in the wild will re-
7 quire the joint commitment and effort of nations
8 within the range of Asian elephants, the United
9 States and other countries, and the private sector.

10 **SEC. 3. PURPOSES.**

11 The purposes of this Act are the following:

12 (1) To perpetuate healthy populations of Asian
13 elephants.

14 (2) To assist in the conservation and protection
15 of Asian elephants by supporting the conservation
16 programs of Asian elephant range states and the
17 CITES Secretariat.

18 (3) To provide financial resources for those pro-
19 grams.

20 **SEC. 4. DEFINITIONS.**

21 In this Act:

22 (1) The term “CITES” means the Convention
23 on International Trade in Endangered Species of
24 Wild Fauna and Flora, signed on March 3, 1973,
25 and its appendices.

1 (2) The term “conservation” means the use of
2 methods and procedures necessary to bring Asian
3 elephants to the point at which there are sufficient
4 populations in the wild to ensure that the species
5 does not become extinct, including all activities asso-
6 ciated with scientific resource management, such as
7 conservation, protection, restoration, acquisition, and
8 management of habitat; research and monitoring of
9 known populations; assistance in the development of
10 management plans for managed elephant ranges;
11 CITES enforcement; law enforcement through com-
12 munity participation; translocation of elephants; con-
13 flict resolution initiatives; and community outreach
14 and education.

15 (3) The term “Fund” means the Asian Ele-
16 phant Conservation Fund established under section
17 6(a).

18 (4) The term “Secretary” means the Secretary
19 of the Interior.

20 (5) The term “Administrator” means the Ad-
21 ministrator of the Agency for International Develop-
22 ment.

23 **SEC. 5. ASIAN ELEPHANT CONSERVATION ASSISTANCE.**

24 (a) IN GENERAL.—The Secretary, subject to the
25 availability of funds and in consultation with the Adminis-

1 trator, shall use amounts in the Fund to provide financial
2 assistance for projects for the conservation of Asian ele-
3 phants for which final project proposals are approved by
4 the Secretary in accordance with this section.

5 (b) PROJECT PROPOSAL.—Any relevant wildlife man-
6 agement authority of a nation within the range of Asian
7 elephants whose activities directly or indirectly affect
8 Asian elephant populations, the CITES Secretariat, or
9 any person with demonstrated expertise in the conserva-
10 tion of Asian elephants, may submit to the Secretary a
11 project proposal under this section. Each proposal shall
12 include the following:

13 (1) The name of the individual responsible for
14 conducting the project.

15 (2) A succinct statement of the purposes of the
16 project.

17 (3) A description of the qualifications of the in-
18 dividuals who will conduct the project.

19 (4) An estimate of the funds and time required
20 to complete the project.

21 (5) Evidence of support of the project by appro-
22 priate governmental entities of countries in which
23 the project will be conducted, if the Secretary deter-
24 mines that the support is required for the success of
25 the project.

1 (6) Information regarding the source and
2 amount of matching funding available to the appli-
3 cant.

4 (7) Any other information the Secretary consid-
5 ers to be necessary for evaluating the eligibility of
6 the project for funding under this Act.

7 (c) PROJECT REVIEW AND APPROVAL.—

8 (1) IN GENERAL.—Within 30 days after receiv-
9 ing a final project proposal, the Secretary shall pro-
10 vide a copy of the proposal to the Administrator.
11 The Secretary shall review each final project pro-
12 posal to determine if it meets the criteria set forth
13 in subsection (d).

14 (2) CONSULTATION; APPROVAL OR DIS-
15 APPROVAL.—Not later than 6 months after receiving
16 a final project proposal, and subject to the availabil-
17 ity of funds, the Secretary, after consulting with the
18 Administrator, shall—

19 (A) request written comments on the pro-
20 posal from each country within which the
21 project is to be conducted;

22 (B) after requesting those comments, ap-
23 prove or disapprove the proposal; and

24 (C) provide written notification of that ap-
25 proval or disapproval to the person who submit-

1 ted the proposal, the Administrator, and each
2 of those countries.

3 (d) CRITERIA FOR APPROVAL.—The Secretary may
4 approve a final project proposal under this section if the
5 project will enhance programs for conservation of Asian
6 elephants by assisting efforts to—

7 (1) implement conservation programs;

8 (2) address the conflicts between humans and
9 elephants that arise from competition for the same
10 habitat;

11 (3) enhance compliance with provisions of
12 CITES and laws of the United States or a foreign
13 country that prohibit or regulate the taking or trade
14 of Asian elephants or regulate the use and manage-
15 ment of Asian elephant habitat;

16 (4) develop sound scientific information on the
17 condition of Asian elephant habitat, Asian elephant
18 population numbers and trends, or the threats to
19 such habitat, numbers, or trends; or

20 (5) promote cooperative projects on those topics
21 with other foreign governments, affected local com-
22 munities, nongovernmental organizations, or others
23 in the private sector.

24 (e) PROJECT SUSTAINABILITY.—To the maximum
25 extent practical, in determining whether to approve project

1 proposals under this section, the Secretary shall give con-
2 sideration to projects which will enhance sustainable inte-
3 grated conservation development programs to ensure ef-
4 fective, long-term conservation of Asian elephants.

5 (f) PROJECT REPORTING.—Each person who receives
6 assistance under this section for a project shall provide
7 periodic reports, as the Secretary considers necessary, to
8 the Secretary and the Administrator. Each report shall in-
9 clude all information required by the Secretary, after con-
10 sulting with the Administrator, for evaluating the progress
11 and success of the project.

12 (g) MATCHING FUNDS.—In determining whether to
13 approve project proposals under this section, the Secretary
14 shall give priority to those projects for which there exists
15 some measure of matching funds.

16 **SEC. 6. ASIAN ELEPHANT CONSERVATION FUND.**

17 (a) ESTABLISHMENT.—There is established in the
18 general fund of the Treasury a separate account to be
19 known as the “Asian Elephant Conservation Fund”, which
20 shall consist of amounts deposited into the Fund by the
21 Secretary of the Treasury under subsection (b).

22 (b) DEPOSITS INTO THE FUND.—The Secretary of
23 the Treasury shall deposit into the Fund—

24 (1) all amounts received by the Secretary in the
25 form of donations under subsection (d); and

1 (2) other amounts appropriated to the Fund.

2 (c) USE.—

3 (1) IN GENERAL.—Subject to paragraph (2),
4 the Secretary may use amounts in the Fund without
5 further appropriation to provide assistance under
6 section 5.

7 (2) ADMINISTRATION.—Of amounts in the
8 Fund available for each fiscal year, the Secretary
9 may use not more than 3 percent to administer the
10 Fund.

11 (d) ACCEPTANCE AND USE OF DONATIONS.—The
12 Secretary may accept and use donations to provide assist-
13 ance under section 5. Amounts received by the Secretary
14 in the form of donations shall be transferred to the Sec-
15 retary of the Treasury for deposit into the Fund.

16 **SEC. 7. AUTHORIZATION OF APPROPRIATIONS.**

17 There are authorized to be appropriated to the Fund
18 \$5,000,000 for each of fiscal years 1998, 1999, 2000,
19 2001, and 2002 to carry out this Act, which may remain
20 available until expended.

○

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Committee on Resources
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July 23, 1997

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MEMORANDUM

TO: Members, Subcommittee on Fisheries Conservation, Wildlife and Oceans

FROM: Subcommittee Staff

SUBJECT: H.R. 1787, Asian Elephant Conservation Act of 1997

On Thursday, July 31, 1997, at 10:00 a.m. in Room 1334 Longworth House Office Building, the Subcommittee on Fisheries Conservation, Wildlife and Oceans will hold a legislative hearing on H.R. 1787, the Asian Elephant Conservation Act of 1997. Those invited to testify include: The Honorable Bruce Babbitt, Secretary, Department of the Interior; Ms. Kathryn Fuller, President, World Wildlife Fund; Dr. Terry Maple, President and CEO, Zoo Atlanta; The Honorable Andy Ireland, Senior Vice President, Feld Entertainment, Inc.; Dr. Raman Sukumar, Center for Ecological Sciences, Indian Institute of Science; Dr. Mary C. Pearl, Executive Director, Wildlife Preservation Trust International; Dr. Michael Stüwe, Research Associate, Smithsonian Institution; and Ms. Shanthini Dawson, Member, International Union for the Conservation of Nature (IUCN) Steering Committee.

BACKGROUND

Asian Elephants (Elephas Maximus):

In Asia, the relationship between man and elephant dates back almost 5,000 years when elephants were first captured and trained for use in religious ceremonies, war, and as draught animals. In fact, ancient Hindu scriptures frequently refer to elephants, the elephant-headed god Ganesh is revered throughout India, and the white elephant has special religious significance for Buddhists throughout Asia. In Chinese culture, elephants have played a special role in folklore, games, medicine and pageantry.

Asian elephants have also been used in forestry operations for many years. Today, wild elephants are still captured and trained for use in logging operations in Burma. Elsewhere throughout their range, domestic elephants are used for ceremonial, tourism and transportation purposes. These activities provide an important source of income to numerous local communities.

Sadly, the Asian elephant is now in grave danger and unless steps are immediately taken by the international community, the Asian elephant will largely disappear from most of its historical range. To date, the Asian elephant has been declared endangered and placed on the U.S. Endangered Species Act list, on the Red List of Mammals by the IUCN-World Conservation Union, and on Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). By being placed on Appendix I, all commercial trade in Asian elephant products was prohibited on a worldwide basis.

Despite these efforts, the population of Asian elephants living in the wild has dramatically fallen to about 40,000 animals, which is less than 10 percent of its elephant cousin (*Loxodonta Africana*) living in Africa. These wild populations are located in thirteen countries in South and Southeast Asia. The largest population of 20,000 Asian elephants, or 50 percent of the total, reside in India; and the smallest population of 50 animals is located in Nepal. Enclosed is a chart summarizing the population estimates. What is equally distressing is the fact that there are only about 14 populations of 1,000 or more individuals in a contiguous area. Seven of these populations are found in Burma and India. In simple terms, this means that such drastic population fragmentation increases the likelihood of geographic extinctions and greatly reduces the long-term viability of the species. In addition, it has been estimated that there are about 16,000 domesticated elephants.

There are a number of important reasons why there has been a severe decline in the number of Asian elephants. The primary reason is the loss of habitat. All Asian elephants need a shady or forest environment, and this habitat is disappearing rapidly throughout Asia. Due to their sheer size and social structure, elephants need large areas to survive. Since Asian elephants inhabit some of the most densely populated areas of the world, forest clearance for homes and large-scale agricultural crops have resulted in a dramatic loss of thousands of acres of their habitat. In essence, elephants and man are in direct competition for the same resources.

Second, while poaching for ivory has not been an overriding reason for its decline, Asian elephants of both sexes are increasingly being poached for bones, hide, meat and teeth. Hide is used for bags and shoes in China and Thailand and bones, teeth and other body parts are used in traditional Chinese medicine to cure various ailments. In fact, this type of poaching even threatens domestic elephants that are allowed to free-range in various forests.

Third, Asian elephants are still captured in the wild for domestication. In Burma, the country with the highest demand for work elephants, adult elephants are captured and trained for use in the timber industry. Regrettably, capture operations inevitably result in some mortalities and it does adversely affect the genetic pool of elephants living in the wild.

Finally, conflicts between elephants and people are increasing at an escalating rate. This is a direct result of the dramatic loss of forest habitat and the ensuing competition for the remaining resources. Every year, thousands of acres of agricultural crops are destroyed by elephants looking for food. In many cases, elephants encounter people where they were not found previously, thereby leading to the destruction of human homes and lives.

In countries where governments are concerned with this ever-increasing problem, measures taken are drastic and very expensive. For instance, in Malaysia, there was large-scale shooting of crop-raiding elephants in the late 1960's and, more recently, the construction of electric fences and translocation of problem elephants to protected areas. Other countries like Indonesia are taking short-term measures by capturing large numbers for domestication. However, they have found no long-term use for these domesticated elephants because there has been no traditional relationship between people and working elephants. In areas where no immediate solutions are provided by governments or local authorities because of lack of financial resources (i.e., Vietnam, Cambodia), people are increasingly taking the law into their own hands and shooting the elephant offenders.

It is also important to understand that effective conservation and management efforts will have a positive effect on other species that reside in the same habitat. In the case of the Asian elephant these include: the Asiatic wild dog, Clouded leopard, gaur, Great Pied hornbill, Hoolock gibbon, kouprey, Lion-tailed macaque, Malayan sun bear, peacock pheasant, rhinoceros and tiger. It is essential to the survival of these species that the Asian elephant not be allowed to disappear from this planet.

Finally, unlike the African elephant, there is no sport-hunting of Asian elephants and no large stockpiles of Asian elephant ivory in government warehouses in Asia or Southeast Asian countries.

H.R. 1787:

On June 4, 1997, Congressman Jim Saxton, along with Representatives Neil Abercrombie, Don Young, George Miller, Shewood Boelhart, Merrill Cook, Randy "Duke" Cunningham, Vern Ehlers, Eni Faleomavaega, Bob Franks, Wayne Gilchrest, James Greenwood, Maurice Hinchey, Sue Kelly, Connie Morella, John Olver, Frank Pallone, Fred Upton, and James Traficant, introduced H.R. 1787, the Asian Elephant Conservation Act of 1997. Since its introduction, Representatives Christopher Shays, Luis Gutierrez, Bernard Sanders, Gary Ackerman and Diana DeGette became cosponsors of the measure.

The fundamental purpose of this legislation is to create an Asian Elephant Conservation Fund and to authorize the Congress to appropriate up to \$5 million per year to this Fund for each of the next five fiscal years to finance various conservation projects.

This bill is modeled after the highly successful African Elephant Conservation Act of 1988 and the Rhinoceros and Tiger Conservation Act of 1994. The new authorization would be separate from those monies appropriated for African elephants, rhinos and tigers.

Under the terms of H.R. 1787, the Secretary of the Interior would carefully evaluate the merits of each proposed conservation project, select those that best enhance the future of the Asian elephant, and give priority to those projects whose sponsors demonstrate the ability to match at least some portion of the Federal funds. In addition, the bill stipulates that the

Secretary may accept donations to assist Asian elephants and shall spend no more than three percent of the amounts appropriated to administer the Fund.

While there may be a great many worthwhile conservation projects, it is likely that the Department of the Interior will be asked to finance efforts to update census figures, monitor known populations of Asian elephants, assist in various anti-poaching efforts, develop improved conservation management plans, translocate threatened individuals or herds of Asian elephants, and educate the public about the value of saving this flagship species of the Asian continent.

Unless immediate steps are taken to conserve this magnificent animal, it will surely continue to disappear from much, if not most, of its traditional habitat. This Nation can ill afford to allow the Asian elephant, which has such a direct impact on so many other species, to become extinct. The goal of H.R. 1787, the Asian Elephant Conservation Act, is to stop the decline and hopefully rebuild the population stocks of this irreplaceable species by financing with a small amount of Federal money a limited number of conservation projects.

Issues

- (1) What are the current population trends for the Asian elephant?
- (2) How have other species living in the same habitat of the Asian elephant been affected by the demise of this animal?
- (3) Based on the experiences of the African Elephant Conservation Fund and the Rhinoceros and Tiger Conservation Fund, what effect would an Asian Elephant Conservation Fund have on efforts to help save this valuable species from extinction?
- (4) Can an authorization of \$5 million per year make a real difference in the conservation of the Asian elephant, and why should Americans care whether this species survives in the future?
- (5) What type of conservation projects are likely to be prime candidates for funding under an Asian Elephant Conservation Fund?
- (6) What positive steps can be taken to stop the use of Asian elephant bones in traditional Chinese medicines?
- (7) What efforts, if any, have been made by the world community to encourage countries, like Burma, to stop capturing wild Asian elephants and using them in timber operations?

Enclosure

ASIAN ELEPHANT POPULATIONS 1996		
COUNTRY	MINIMUM	MAXIMUM
India	20,000	24,000
Burma	5,000	6,000
Indonesia	2,500	4,500
Laos	2,000	4,000
Sri Lanka	2,500	3,000
Thailand	1,500	3,000
Cambodia	2,000	2,000
Borneo	500	2,000
Malaysia	800	1,000
Vietnam	300	400
China	250	350
Bhutan	60	150
Nepal	50	85
TOTALS	37,460	50,485

SOURCE: IUCN's Species Survival Commission's Asian Elephant Specialist Group.
(Figures are rough estimates.)



Statement of

Eric Dinerstein, Ph.D.

**Chief Scientist and Director,
Conservation Science Program**

World Wildlife Fund - U.S.

**Saving One of Asia's Most Enduring Symbols:
The Asian Elephant Conservation Act of 1997**

Subcommittee on Fisheries Conservation, Wildlife and Oceans
Committee on Resources
U.S. House of Representatives

July 31, 1997

World Wildlife Fund

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Saving One of Asia's Most Enduring Symbols:

The Asian Elephant Conservation Act of 1997

Mr. Chairman, members of the Subcommittee, I am Eric Dinerstein, Chief Scientist and Director of the Conservation Science Program at the World Wildlife Fund. I want to thank the Subcommittee for this opportunity to testify on behalf of WWF and its 1.2 million members in the United States. WWF strongly supports passage of the Asian Elephant Conservation Act of 1997, and would like to express appreciation to Mr. Saxton, Mr. Abercrombie, and the other Congressional sponsors for introducing this important legislation.

Few species capture the public's imagination as do elephants, both African and Asian, and few species are as tied to the cultures of so many nations. In recent years, the plight of the African elephant has been more prominent, as worldwide attention focused on halting the poaching for ivory that reduced the species' numbers by half in the 1980s. Although the Asian elephant has not suffered such a steep and sudden decline, it too faces extinction in the wild. The combined impact of habitat loss, poaching for ivory, meat, and hides, and increasing conflicts with people threatens the species' survival in the next century. In fact, with a total wild population of only 35,000 to 50,000, the Asian elephant now numbers less than one tenth of its African counterpart. The erosion of its habitat over the past half century also has fragmented remaining wild populations to the point that fewer than ten populations comprising more than 1,000 individuals are left throughout the species range, jeopardizing the species' long-term viability.

The Asian elephant urgently needs our help. Securing its survival requires stronger protection measures for remaining herds in the 13 countries where the species lives, including establishing corridors to link existing forest reserves and allow for natural migration, stemming the illegal killing for ivory and other parts, and reducing human-elephant conflicts.

Addressing these broad needs requires the kind of financial and technical assistance from the international conservation community that the Asian Elephant Conservation Act would provide. Carefully targeted, the resources this legislation could offer would have an immediate positive impact. The conservation benefits would be far-reaching not only for Asia's elephants, but also for the many other species that share the Asian elephant's range and the human communities that have co-existed with this species for so long.

The Asian Elephants' Relationship With People

Perhaps no other wild animal has had such a close relationship with people. Here in the United States, for example, many Americans are familiar with trained Asian elephants as a circus attraction. Elephant houses are major points of interest in zoos around the country, drawing millions of visitors annually to watch and learn about these social animals. Asian

phants even appear in the movies, their intelligence and receptivity to human contact making them popular features.

In Asia, the unique relationship between people and elephants runs even deeper and goes back much further — over 4,000 years — when elephants were first captured and trained as draft animals and for use in religious ceremonies and warfare. Its cultural contributions are especially noteworthy; the species is highly esteemed. Ancient Hindu scriptures frequently refer to elephants, the elephant-headed god Ganesha is revered throughout India, and the white elephant has special religious significance for Buddhists throughout Asia.

In addition to remaining wild populations, there also are approximately 16,000 domesticated elephants in Asia. For years, Asian elephants have been important economically, especially in forestry operations. Timber extraction using elephants has less impact on surrounding forests during selective logging than less precise mechanical methods that damage large areas, disrupting ecological processes such as nutrient cycling and forest regeneration, and creating tracts of bare soil which wash into rivers. Today, only in Burma are wild elephants captured and trained for use in logging operations. Elsewhere throughout their range, domestic elephants are used for transportation, draft, and tourism, providing a reliable source of income to numerous local communities.

The Asian Elephant as a Keystone and Flagship Species

Beyond this unique relationship with human beings, the Asian elephant is a flagship for conservation of the tropical forest habitats in which it is found. Elephants range over long distances and across a variety of habitats that are home to numerous other wildlife species. They need very large areas to survive, effective conservation and management of elephants deliver widespread benefits for other endangered species such as the tiger, rhinoceros, the newly discovered Pseudoryx or sao la, kouprey, clouded leopard, Asiatic wild dog, gaur, Bornean sun bear, Hoolock gibbon, lion-tailed macaque, green peafowl, great pied hornbill, and other wildlife sharing its home.

The Asian elephant plays a key role in shaping its environment. Elephants knock down trees while feeding, and these fallen trees then become accessible to smaller herbivores such as blackbuck and sambar that cannot reach the branches of upright trees. Asian elephants disperse the seeds of certain grasses, shrubs and trees, which they deposit in and fertilize with their dung. A multitude of bird species feed on these seeds, as well as the myriad insects that aggregate in the droppings. Few species have such a profound effect on the habitat and species around them.

Threats to Asian Elephants

Living in the world's most densely populated region presents daunting challenges for the Asian elephant. Because elephant herds range over such large areas, protection is more difficult than for many other species. The myriad threats the Asian elephant faces today is

reflected in the fact that the species is currently listed as endangered under the U.S. Endangered Species Act and the World Conservation Union's Red List of Mammals, and also under Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

A brief look at remaining numbers of wild Asian elephants in its current range illustrates why the level of concern among conservationists is so high.

Current Range of Wild Asian Elephants

Bhutan	60-150
Burma	5,000-6,000
Cambodia	1,000-2,000
China	250-350
India	20,000-24,000
Indonesia	2,500-4,500
Laos	1,000-3,000
Malaysia	800-1,000
Borneo	500-2,000
Nepal	50-85
Sri Lanka	2,500-3,000
Thailand	1,500-3,000
Vietnam	300-400

Sources: IUCN's SSC Asian Elephant Specialist Group and WWF offices in Bhutan, Nepal, Vietnam, and India.

The absence of good data from past times, and the difficulty of counting elephants living in dense tropical forests, makes it difficult to precisely quantify the decline in Asian elephant numbers from historical levels. But destruction of habitat has no doubt led to a precipitous decline in elephant populations and a considerable loss of biodiversity throughout their range. The Asian elephant once ranged from modern Iraq and Syria to the Yellow River in China, yet today it is found only in fragmented populations scattered from India to Vietnam, with a tiny besieged population in the extreme southwest of China. Current threats to remaining populations can be summarized as follows:

Habitat Loss and Fragmentation. Asian elephants inhabit some of the most densely populated areas of the world, and loss of remaining habitat poses a grave threat. Pressures of human population growth are most severe in countries such as Vietnam and India where once extensive forest habitats have contracted dramatically. Encroachment by migrating human populations in countries such as Indonesia pose another threat, and in places like Peninsular Malaysia, large expanses of forest have been cleared for palm oil and rubber plantations and other agricultural activities. Throughout their range, elephants are competing directly with people for the same resources.

Due to the loss and degradation of their habitat, Asian elephant populations have become extremely fragmented. Today there are probably fewer than ten populations with more than 1,000 individuals in any one contiguous area; half of these are found on the Indian subcontinent. The problem is more severe in southeast Asia; only four populations have more than 1,000 elephants, two of which are found in Burma. Small elephant populations isolated in patches of forest in countries such as Vietnam, Peninsular Malaysia, and Cambodia face sudden extirpation from disease outbreaks and natural disasters and risk gradual erosion of genetic health due to inbreeding.

Human-Elephant Conflicts. Conflict between elephants and people is not a new phenomenon; elephants have been raiding crops since time immemorial. However, the reverence people had for elephants in Asia historically ensured its peaceful coexistence and made them tolerant of the occasional intrusion. In recent times, human settlements have been pushing further and further into elephant habitat, and the incidence of crop-raiding has increased by several orders of magnitude, leading to the destruction of human homes and lives. As people have suffered escalating losses to elephants, their permissiveness has given way to anger and frustration. Every year thousands of hectares of agricultural crops are destroyed by elephants looking for food.

In some countries, governments have taken drastic or expensive measures to minimize conflicts. Malaysia, for example, resorted to large-scale shooting of crop-raiding elephants in the late 1960s, and still translocates problem elephants to protected areas. Other countries, for example Indonesia, rely on short-term remedies such as capturing elephants for domestication. Where no immediate solutions are provided by governments or local authorities for lack of financial resources, people are increasingly taking the law into their own hands by shooting trespassing elephants.

Poaching. Poaching of Asian elephants for ivory, although far less significant than with African elephants, has played a role in reducing numbers in South Asia in the past, and is still a problem in parts of South India, Cambodia, Vietnam, Burma, and Laos. In South Asia, poaching also has altered the ratio of males to females in some areas, causing concern about genetic threats to the population. Skewed sex ratios may cause inbreeding, which can lead to genetic drift, reduce genetic diversity within a population, weaken resistance to epidemics, and compromise overall reproductive success. Poaching of Asian elephants of both sexes for meat, hide, bones and teeth is on the rise. Hide is turned into bags and shoes in Thailand and China, and bones, teeth and other body parts are used in traditional Chinese medicine to cure various ailments. In Vietnam, such poaching is a threat even to the remaining domestic elephants that are allowed to roam freely in forests.

Capture for Domestication. Capturing elephants for domestication threatens wild populations, whose numbers already are greatly reduced, and inevitably results in mortalities. In Burma, the country with the highest demand for work elephants, there is some economic logic in capturing adults for use in the timber industry, rather than breeding elephants in captivity. An adult female elephant used for breeding would be unavailable for

work during her two-year pregnancy and for up to two years afterwards, until her calf weaned. Captive-born elephants then have to be nurtured for a full ten years before they can be employed economically.

In other countries, however, there is less justification for taking wild elephants into captivity. In Indonesia, for instance, large numbers of elephants are being rounded up for domestication as a conflict resolution measure. There is no precedent in Indonesian culture for capturing and training elephants, and it was not until the 1980s that captive elephant managers began to acquire the skills and techniques required for such operations. Since that time over 600 elephants have been taken from the wild, with plans to remove another 600 over the next five years. However, elephants are not used in the logging industry, only a limited number can be used for other purposes such as tourism. Therefore, the cost of capturing and maintaining these animals seems a misguided use of the meager conservation resources available in this country.

The Asian Elephant Conservation Act

The threat of extinction looms large for the Asian elephant. Conservation efforts by range country governments and international conservation groups have been underway at least two decades. Unfortunately, economic and political stress has made it difficult for some countries to conserve their wildlife resources or to enforce protection laws effectively. Thus, the species finds itself in a precarious situation. If the Asian elephant is to survive in perpetuity, the international conservation community must work with range countries to meet these challenges head-on.

The conservation assistance provided by the Asian Elephant Conservation Act will be a significant step forward. A serious impediment to sustainable conservation measures for the Asian elephant is financial support. In many countries, national governments have demonstrated political commitment but many activities are sidelined due to insufficient funding. Although the Asian Elephant Conservation Act will not single-handedly save the Asian elephant, it would serve three key purposes. First, the fund would provide a much needed but vital source of support for on-the-ground projects to benefit the Asian elephant and its habitat. Second, it would generate matching funds from other sources for priority activities and as with the African Elephant Conservation Fund, would leverage funding commitments from other governments and organizations. Third, through this bold initiative, the United States sends a strong message to the governments of the range countries that the plight of the Asian elephant is not merely a domestic concern — that even a country with no elephants of its own cares deeply about the survival of this remarkable species.

WWF believes that an investment strategy for conserving the Asian elephant should first concentrate on preserving habitats still large and intact enough to support healthy elephant populations over the long term, and on establishing habitat corridors between important areas. The Asian Elephant Conservation Act could provide the following guidelines directed toward these goals:

1. *Conserving priority habitat areas for Asian elephants across their range.* The Asian Elephant Conservation Fund provides a source of support for protection of the remaining elephant populations and their habitat against further loss and degradation. WWF and other international conservation organizations such as the Wildlife Conservation Society (WCS) have been working to identify priority elephant habitat throughout the species' remaining range, and to promote establishment and management of corridors and special protected areas. To secure the future of Asian elephants, it is necessary to identify and evaluate the remaining habitat areas where the prognosis for long-term survival is most promising, and then invest conservation resources preferentially in these areas.

WWF is currently supporting an assessment by two of the world's foremost experts on the Asian elephant, Dr. Raman Sukumar and Dr. Charles Santiapillai, of ten to 15 habitat areas where Asian elephants have the best chance of long-term survival. This evaluation will be based on population size, habitat integrity, proximity to major human settlements, and the degree of threats such as poaching, logging, and conversion to agriculture. Dr. Sukumar will explain in his testimony how the project will generate a predictive model of where conservation investments would have the best returns for elephants and where land might be acquired for new elephant reserves. I mention this to demonstrate that these high-priority areas, once identified and assessed, would be prime targets for the types of intensive conservation efforts that the Asian Elephant Conservation Fund could support. With a concrete display of U.S. support, Asian range countries could conduct planning and management activities they once could not afford in order to protect elephants and their habitat.

2. *Promoting co-existence between people and elephants by developing and implementing sound management practices that would prevent or reduce conflict.* The act specifically recognizes the need for programs and projects to address the conflicts between elephants and people that arise from competition for the same habitat. National governments and conservation organizations have conducted surveys and sociological studies in a number of Asian countries to document recent human/elephant conflicts and develop methods to minimize these often deadly encounters. Because elephants are wide-ranging animals, it is not always possible to set aside reserves sufficiently large to prevent their migration beyond borders and keep them segregated from human communities. But compromises are possible that could benefit both sides. For example, buffer zones can be established at the perimeter of protected areas where local people can pursue economic activities that are compatible with elephant conservation. Revenue from ecotourism can be channeled into community development projects such as building hospitals and schools. Local farmers can be compensated for crops lost to raiding elephants. The current resources of international conservation groups are grossly inadequate to address the problem of human/elephant conflict. The Asian Elephant Conservation Fund could provide desperately needed seed money and matching funds, in partnership with local and international groups, to greatly expand the range of activities to mitigate the struggle between people and elephants.

3. ***Promoting effective law enforcement.*** WWF is also encouraged that the act points out the need for projects to enhance compliance with CITES and other laws to curb the illegal taking and trade of Asian elephants. While the Asian elephant does not face the same degree of threat from trade as the African elephant, poaching for ivory, skin, and other parts continues. The Asian Elephant Conservation Fund would provide an opportunity to create or expand projects to strengthen compliance with CITES and to encourage greater participation by local communities in efforts to protect elephants. It also could support review and strengthening of elephant conservation legislation in the range countries as well as training of law enforcement personnel in methods for investigating and prosecuting violators. Anti-poaching patrol teams that monitor and protect elephants are an indispensable component of any elephant protection effort and are always in short supply. Such teams could be trained, armed and equipped by the fund.

4. ***Promoting greater scientific understanding of the Asian elephant.*** As Dr. Sukumar's work illustrates, there remains a need for greater scientific understanding of the dynamics of Asian elephant populations and their conservation requirements. Using GIS and field surveys, researchers have identified some parameters and basic needs, but again, resources are scarce. This is another area directly addressed in the act where support from the United States could prove immediately beneficial.

5. ***Matching Funds.*** A common theme mentioned throughout has been the act's role as a catalyst for generating matching contributions to Asian elephant conservation projects. As with the African Elephant Conservation Fund and the more recently established Rhino and Tiger Conservation Fund, we anticipate that a major component of the Asian Elephant Conservation Fund's success would be its ability to leverage funding from other sources. For example, since 1990, projects supported by the African Elephant Conservation Fund have received close to \$6 million in *matching* contributions, which surpasses the value of grants made directly from the fund. WWF has over 30 years of experience in Asian elephant conservation. Working in nine of the 13 range countries, WWF has invested close to \$5 million in recent years in projects to protect Asian elephants and their habitat.

Similarly in Asia, private conservation groups, local governments, and others have many ideas for programs and projects, but cannot bear the costs alone. With seed money or matching grants from the fund, however, many more such initiatives could be brought to life. WWF is encouraged that the legislation promotes such partnerships by giving priority to those projects with the potential for some measure of matching funds. Through the fund's well-conceived emphasis on small grants, cooperation with range countries and private partners, and a balanced set of priorities for on-the-ground projects, it will clearly have an immediate positive impact.

Before concluding, Mr. Chairman, I would like to raise one cautionary note. WWF strongly believes that funds for an Asian Elephant Conservation Fund should not affect the modest funds currently earmarked for the African Elephant Conservation Fund or the Rhino and Tiger Conservation Fund. Though these species face some common threats, their

Seventy-five copies, single spaced plus WordPerfect file to Subcommittee on Fisheries Conservation, Wildlife & Oceans, U.S. House of Representatives, H1-805 O'Neill House Office Building, Washington, D.C. 20515 by Monday, July 28, 1997 (contact: Kathy Miller at 202-226-0200)

Testimony before the House Subcommittee on Fisheries Conservation, Wildlife and Oceans
by
Dr. Michael Stuiwe
1500 Remount Road, Front Royal, VA 22630, USA
in regard to
H.R. 1787, The Asian Elephant Conservation Act

Subcommittee's Questions

I was asked by the Subcommittee to answer the following questions:

"... whether the authorization level is appropriate, what type of conservation projects are likely to seek Federal support, and what other steps could be taken to help this magnificent species."

Before proceeding with my testimony, I would like to make it clear to the Subcommittee that I am testifying as an individual scientist who is currently working with Asian elephants. Although I am presently a Research Associate of the Smithsonian Institution's Conservation and Research Center, I do not appear on behalf of the Smithsonian Institution. The Institution has not formulated, adopted, or endorsed a formal policy concerning the conservation of the Asian elephant at this time, and takes no official position on the pending legislation.

Overall, I am supportive of the proposed bill. I especially endorse its suggested funding mechanism of competitively peer-reviewing applications, submitted by elephant range country individuals and organizations who actually work in the field and thus are likely to know the most urgent research and management needs.

Some Institutional Background on Elephant Research

The Smithsonian's National Zoological Park and Conservation & Research Center have been conducting research on Asian elephants for decades. During this time period, data were collected in many elephant range countries, including India, Indonesia, Malaysia, Myanmar, Nepal, Sri Lanka, and Thailand. Research covered wild and domesticated populations and included topics like "behavior and ecology of the Asian elephant", "population genetics of domesticated elephant populations", and "evaluation of elephant translocations as a management tool to solve conflict situations". This latest project on elephant translocations is a collaboration with the Government of Malaysia, additional information can be found at our web site: <http://www.si.edu/elephant>. Findings of all of the above studies were published in scientific journals, popular magazines, reports, and video documentaries.

Status Quo of the Asian Elephant

Instead of repeating what many are likely to write about this topic for the hearing's public record, I would like to refer to the discussion paper "Overview: Asian Elephant Conservation Initiative" which I helped to compile (Appendix 1).

Question: Is the authorization level appropriate?

The authorization request asks for five million USD annually. If that sum is indeed ever reached, and if the funds are spent wisely, the authorization level appears to be high enough to have a major impact on Asian elephant conservation. "Wise spending" would include funding guidelines which ask for a highly competitive process for proposal applications, which favor applications from organizations and institutions in range countries, which avoid awarding large administrative overheads, which avoid duplication of efforts and rather seek wide and instantaneous dissemination of results, and which include strong mechanisms for project evaluation and review throughout its lifetime. "Wise" handling of the new funding instrument "Asian Elephant Trust Fund" might include intensive fund-raising efforts for the Trust Fund in the commercial and private sector, to match or exceed the funds set aside by the US Government.

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Question: What type of conservation projects are likely to seek Federal support?

Two issues clearly stand out in Asian elephant conservation today:

1. The ever increasing conflict between man and elephant over the same stretches of land, which is probably the main reason for the decline of wild elephant populations throughout its range;
2. The vast gene pool domesticated Asian elephants represent (ca. 25% of the world's total Asian elephant population), and the fact that there is very little reproduction among this part of the population. At least this one fourth of the Asian elephant population is therefore not contributing to the general gene pool.

I would assume that projects addressing the conflict issue will be most prominent among those seeking Federal support. Conflict situations occur throughout the Asian elephant's range, a question of stake holders and their interests in the land. While the human stakeholders and their interests can vary between locations, the basic scenario is usually the same: Elephants have used a certain area for many years without major interaction with people. Latter were few with no or only little interest in the land. Then more people decide to develop that area for agriculture, for industrial or housing projects, etc. With that decision they take a financial stake in the land. As a result, they start protecting it. Much of the protective effort is directed towards elephants, who readily destroy crops and other property. Thus a new conflict area is created. But how can the conflict be solved? Many solutions have been tried, some are generally applicable, others are site-specific, few if any have been entirely successful. This is the frontier at which I believe, the Asian Elephant Conservation Act could have its biggest impact. Major topics for projects to be funded by the Trust Fund may include:

- Identifying ranges where elephants "can be allowed" to have a destructive impact;
- Influencing local legislation to set aside those ranges;
- Identifying and testing of technologies which protected human investments from elephant impact at the border of those ranges;
- Rapid dissemination and implementation of successful techniques to interested individuals, organizations, and agencies throughout the elephant range;
- Financial aid to poor regions to implement those techniques;
- Development and implementation of awareness campaigns which promote the cultural value of elephants and their co-existence with humans.

Within the range countries of the Asian elephant, human cultural values are extremely diverse and human responses to elephant impacts vary dramatically. Consequently, I believe that to be effective, conservation efforts for elephants should concentrate on site-specific rather than regional or national efforts. This will only be possible if local initiatives by individuals and organizations can secure adequate funding to explore and test alternative methodologies. The single most important task might just be to work directly with the people on-site "who take the heat" day after day, night after night.

would we want them in our backyards in the capitol's suburbs? The Asian Elephant Trust Fund might reach its goals and objectives faster, if everyone associated with it tries to avoid pushing our values onto people and governments in the range countries, but rather looks at the situation with the eyes of the directly effected. And their point of view in many areas is likely to be: "What economic benefit is there for me to have elephants around?"

Elephants and Mine Fields - can these issues be combined? It is just a thought, but maybe worth contemplating for a while. Little is known, but there are likely to be several major elephant populations in the border region of Vietnam, Cambodia, and Laos. They need to be protected. Huge areas in the region are still contaminated with landmines. As people are moving back into these areas eager to plow their fields again, many die or are crippled in the process. They need to be protected. Is it at all conceivable that mined elephant land could be leased from its owners and set aside as protected areas for elephants in return. Could people use the money from the lease to settle elsewhere? Could the conservation and the mine removal communities work together on this?

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DISCUSSION PAPER

OVERVIEW : ASIAN ELEPHANT CONSERVATION INITIATIVE

The Asian elephant has been and is increasingly in grave danger of extinction. The surviving populations in the wild number between 35,000 and 45,000. It is currently listed as endangered in the IUCN Red List of Mammals, and in Appendix I under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

IMPORTANCE OF THIS FLAGSHIP SPECIES

The unique relationship between man and elephants in Asia dates back to almost 5,000 years, when it was first captured and trained for use in religious ceremonies, war and as a draught animal. Its cultural contributions have been noteworthy and regarded with high esteem. No other animal has had such a close relationship with people while still remaining effectively wild. Ancient Hindu scriptures frequently refer to elephants and the god Ganesha is revered throughout India, the white elephant has special religious significance for the Buddhists throughout Asia. In Chinese culture too elephants have had a special significance throughout the years in folklore, games, pageantry and medicine.

Until recently Asian elephants were extremely important in an economic sense, especially in the timber industry. Timber extraction using elephants, as opposed to mechanical forms, in selective logging operations is the least damaging method in tropical forests. Today this is the case only in Burma where wild elephants are still captured from the wild, elsewhere domestic elephants are still used for transportation, tourism and ceremonial purposes. This provides an important source of income to numerous local communities who have traditionally caught and domesticated elephants from the wild.

Most important of all, the Asian elephant is a flagship for the conservation of tropical forest habitats which is home of numerous other species which are found there. In order to conserve elephants large tracts of forest habitats have to be protected and managed and in doing so other species such as the tiger, rhinoceros, Asiatic wild dogs.....and other biodiversity. In Asia the role of elephants in the maintenance of forest structure is also an important function.

THREATS TO ASIAN ELEPHANTS

Habitat loss and population fragmentation

Unlike the African elephant whose recent decline in numbers has been the dramatic large-scale poaching for ivory, the Asian elephant is faced with more intractable threats. Asian elephants are found in areas with the world's densest human populations, some of which are the poorest nations in the world and others with some of the highest economic growth. The ever increasing pressures due to this exponential growth of human populations, eg Vietnam, India and Indonesia, and its corresponding pressure on natural habitats in the form of encroachment of mobile human populations, forest clearance for large-scale agricultural crops, eg Peninsular Malaysia for oil palm, has resulted in a dramatic loss of forest cover. This in turn has meant that elephants and people are in direct competition for same resources (see below).

Asian elephant populations are highly fragmented, due to loss and degradation of habitat, with fewer than ten comprising more than 1000 individuals in any one contiguous area, and more than half of these are found in south Asia (put in foot note here with revised population estimates). Fragmentation is more severe in the south-east Asian region with no more than three populations having more than a 1000 elephants, primarily in Burma. These drastic fragmentations greatly increase the chances of geographic extinctions, eg Vietnam, Peninsular Malaysia and Cambodia, and greatly decreases long-term viability.

Human-elephant conflict

The reverence people have for elephants in Asia has historically promoted its peaceful coexistence even to the extent of tolerance for occasional incidents of conflict in the form of crop-raiding. But this inherent tolerance has almost disappeared with the increasing and severe consequences of human-elephant conflict, which is a direct result of drastic loss of habitat and competition for resources. Every year thousands of hectares of agricultural crops are destroyed by elephants looking for food, in addition to the destruction of human homes and lives.

In countries where governments are concerned with this ever increasing problem, measures taken are drastic or are very expensive, eg Malaysia - large-scale of shooting of crop-raiding elephants in the late 1960s to constructing electric fences and translocating problem elephants to protected areas. Other countries like Indonesia are taking short-term measures by capturing large numbers for domestication, however, they have found no long-term use for these elephants because there has been no tradition of using elephants in the forestry sector.

Where no immediate solutions are provided by governments or local authorities because of the lack of financial resources, eg Vietnam, Cambodia, Laos, people are increasingly taking the law into their own hands and shooting the offenders.

Poaching

Poaching of Asian elephants of ivory, although far less significant than with African elephants, has played a role in reduction of numbers in past in south Asia, and is still a problem in parts of southeast Asia, eg Cambodia, Vietnam, Burma, Laos. In south Asia poaching has drastically damaged the sex ratio in some areas and generated concern about the genetic threats to the population. Skewed sex ratios increase genetic drift which leads to inbreeding, high juvenile mortality and low overall reproductive success. Limiting local gene pools also significantly increases the chances of herd-threatening epidemics.

Asian elephants of both sexes are increasingly being poached for meat, hide, bones and teeth. Hide is turned into bags and shoes, eg Thailand, China, and bones, teeth and other body parts are used in traditional Chinese medicine to cure various ailments. In some countries such poaching is a threat to even the remaining domestic elephants that are allowed to free-range in forests, eg Vietnam.

71

Capture for domestication

Capture of elephants for domestication is a threat to wild populations where numbers are already greatly reduced, eg Burma, Indonesia, Vietnam. Capture operations inevitably result in mortalities. In Burma it makes economic sense to capture adults and train them for use in the timber industry, because captive breeding would mean an adult female working elephant is in effect unavailable for the industry for a 3-4 year period (gestation and nurturing of young).

Elephants born in captivity then have to be nurtured for a full 10 years before they are of use to the industry.

THE CHALLENGE AHEAD

The threat of extinction looms high for the Asian elephant. Conservation efforts, spearheaded by range state governments and international conservation groups, aimed at Asian elephants and their habitat have been in place since 1976. Unfortunately, the economic situation has made it practically impossible for the countries with elephants to manage their resources or to enforce laws

effectively. Thus the species finds itself in the very precarious situation it is in today. If the Asian elephant is to survive in perpetuity, the challenges that need to be met head-on are :

- ▶ protection of the remaining elephant populations and their habitat against further loss and degradation by designing and managing special protected areas.
- ▶ promotion of co-existence between people and elephants in and around these protected areas by developing and implementing sound management practices that would prevent or reduce conflict.
- ▶ promotion of effective law enforcement through participation of local communities
- ▶ restoration of the congenial relationship that previously existed between people and elephants through education and awareness programmes.

The single largest impediment to implementation of sustainable conservation measures for the Asian elephant is financial support, and many activities are not being carried out due to insufficient funding.



**Statement of Andy Ireland,
Senior Vice President, Feld Entertainment, Inc.**

to

**the Subcommittee on Fisheries Conservation, Wildlife and Oceans
Committee on Resources
United States House of Representatives**

**Regarding H.R. 1787, The Asian Elephant Conservation Act
July 31, 1997**

Ringling Bros. and
Barnum & Bailey
Combined Shows, Inc.

Ice Creams and
Holiday On Ice, Inc.

Ringling Bros. and
Barnum & Bailey®

Siegfried & Roy®
at The Mirage®

Walt Disney's
World On Ice™

Ringling Bros. and
Barnum & Bailey
Clown College®

The Wizard of Oz
on Ice™

Madhattan™
New York-New York
Hotel & Casino

P.T. Barnum's
World of Wonderment
at The Bizarre™

On behalf of Feld Entertainment, Inc., the parent company of Ringling Bros. and Barnum & Bailey®, I would like to thank you for this opportunity to express our support for H.R. 1787, The Asian Elephant Conservation Act. As a world renowned leader in the field of live, family entertainment, Feld Entertainment, Inc. is proud to include among its many entities, Ringling Bros. and Barnum & Bailey® circus, Walt Disney's World On Ice®, and Siegfried & Roy at the Mirage®.

At Feld Entertainment, the care and protection of exotic and endangered animals has always been an important element of our corporate vision. The Asian elephant, in particular, is one of our most popular animal performers and perhaps the species most commonly associated with The Greatest Show On Earth.

We at Feld Entertainment believe, as most in the conservation community have concluded, that a successful conservation program for the Asian elephant and other species is built on three important elements: education, captive-breeding and research, and habitat conservation. Through our work with Ringling Bros. and Barnum & Bailey, the largest and most highly respected circus performing in North America, we recognize the unique opportunity we have not only to entertain, but to educate millions of our patrons each year about the needs and abilities of rare and exotic animal species.

THE CONSERVATION AND EDUCATION VALUE OF PUBLIC DISPLAY

Our role as an educator is one which we take very seriously. The affection and awe that elephants generate among our audiences helps focus attention on the current challenge facing the future survival of the species. In fact, studies have shown that the public display of animals contributes to heightened public awareness of the animals themselves and of man's responsibility for their well-being and protection. This is especially true for children, who not only become more aware of the animals and their special needs and abilities, but also experience first hand the importance of caring for and respecting all animals.

In an effort to quantify the education and conservation value of public display, Ringling Bros. commissioned two studies on the effect of live animal entertainment on education and effect of education on preservation of endangered species. The Yale University Study, "The Circus as an Educational Experience: Teaching Children About Animal Life," reflects a survey of general academic articles and studies on the educational value of live entertainment. The Roper Organization's poll of teachers and parents focusses more specifically on the link between live viewing of animals in the circus environment and the resulting attitudes of parents, teachers and children toward the need for conservation of endangered species. The results speak strongly in terms of the circus' profound effect on shaping the attitudes of adults and children alike toward the value of witnessing live animals in a performance setting and the increasing awareness of the need to conserve and protect exotic wildlife. Some of the more compelling evidence is summarized below:

- Ninety-six percent of teachers say that seeing animals in a circus adds to the interest students have in learning about animals and makes them want to protect these animals in the wild. (Roper Poll, p. 13)
- Live animal acts evoke huge responses from children and are much talked about afterwards. The glamour of the circus experience stimulates a child's interest in animals and makes him more receptive to learning more about animals. (Yale Study, p. 25)
- Circus visits provide an opportunity for teachers and parents to enhance learning about animals (and thus conservation needs) through the use of follow up materials. (Yale Study, p. 37)
- Seventy-eight percent of teachers have added circus or animals to their curriculum as a result of circus attendance (Roper Poll, p. 17). Eight in ten teachers feel that after a visit to the circus, students will be more likely to protect these animals in the wild as a result of their new knowledge and respect for wildlife.

FELD ENTERTAINMENT,
JULY 31, 1971
PA

Significantly, the positive educational value of seeing animals in the context of a circus has also been acknowledged by Dr. Marthe Kiley-Worthington, a famed ethologist. Dr. Kiley-Worthington was commissioned by the Royal Society for the Prevention of Cruelty to animals to carry out an independent, scientific study of animals, in comparison with animals in zoos and other husbandry systems and the wild. Considered preeminent in her field, Dr. Kiley-Worthington was one of the ethologists to live with and study wild African animals and has been an animal behavior consultant since 1971. Dr. Kiley-Worthington confirms that:

Circuses could have an important role to play here [in public education], particularly in relation to the elephants and some of the threatened big cats. I see this role not only in breeding the endangered species (which as in the case of the snow leopard they have already had some success with) but in raising public interest to the plight of species by demonstrating their special cognitive abilities . . .

In this way they [circuses] could have an important role to play in educating the public and heightening the respect for individual animals, their unique intelligences and amazing abilities.¹

Thus, it cannot be disputed that there exists a strong and compelling educational value to the public in viewing exotic and threatened species. Such knowledge and awareness of endangered and threatened species are the first crucial steps toward conservation. Children who are sensitized toward the needs and plight of endangered and threatened species are more likely to be conservation-minded as they mature. Parents whose children are interested in animals often take on their children's interests and share in the learning process. As adults gain and share their children's awareness, they may act in ways which promote conservation efforts either through the political process or public activism and involvement in conservation causes. There is a positive net effect on conservation and, thus, enhancement of survival of the species.

That conservation begins with a well-informed public could not have been better articulated than by the late Mollie Beattie, former Director of the U.S. Fish and Wildlife Service at her confirmation hearings, during which she stated, "The children in inner city schools hold the earth in their hands in a few years. If they do not get a chance to learn and marvel about the earth and its creatures, the Service cannot succeed in . . . any aspect of its mission."²

¹See M. Kiley-Worthington, *Animals in Circuses and Zoos: Chiron's World?*, Little Eco Farms Publishing (1990), p. 222.

² See Hearings Before the Senate Committee on Environment and Public Works, 103rd Cong., 1st Sess. (testimony of Mollie Beattie), July 28, 1993.

Importantly, however, the conservation education value of animal exhibitions goes far beyond that absorbed by the general public. Exhibition also provides the opportunity for a strong educational benefit to professionals who work with these non-native wildlife. The behavior aspects of these animals, as well as information regarding husbandry and breeding, may all be learned by animal care professionals, circuses, zoos and other locations. In turn, this knowledge is shared among professionals and the likelihood of conservation of the species is truly enhanced by this educational experience.

Finally, in addition to the value of public display, Ringling Bros. has also developed educational materials and programs to augment the entertainment experience. These programs include: (1) providing educational materials about our performing animals for use in elementary schools, (2) an audience participation program immediately prior to performances which allows people an up close opportunity to view and ask questions about Asian elephants and other animals, and (3) providing materials at circus performances regarding the need to protect and conserve the various exotic animal species under our care.

A COMMITMENT TO CONSERVATION -- THE RINGLING BROS. CENTER FOR ELEPHANT CONSERVATION

Asian elephants have long been an important and beloved part of the Ringling Bros. culture and history. The first Asian elephant to come to the United States arrived in 1796, and became an instant hit with American audiences. We consider the elephants in our circus family to be "ambassadors" for their brethren in the wild.

To assure the survival of this magnificent species, Ringling Bros. created the Center for Elephant Conservation in Polk City, Florida, dedicated to the breeding, conservation, and scientific study of Asian elephants. With more than 126 years experience successfully living and working with Asian elephants, Ringling Bros. has gained extensive practical and scientific knowledge of elephant behavior, social structure, and veterinary needs. This unique base of knowledge, as well as ongoing input from Ringling Bros. staff veterinarians, animal trainers and animal handlers, guided the construction and design of this 200-acre facility. By creating a safe, comfortable and private environment, the Center is the first facility of its kind to put the reproductive needs of the elephants first and foremost.

The Center is making tremendous strides in the areas of conservation, reproduction and research of the Asian elephant. To date, nine Asian elephant calves have been conceived and delivered under the care of Ringling Bros. Our herd of elephants is the largest and most genetically diverse gene pool of Asian elephants outside of southeast Asia, an important factor in successful efforts to preserve the species. Our large herd also provides an exceptional opportunity for scientific study of Asian elephant breeding and behavior, and we are pleased to

share our animal husbandry knowledge with the rest of the scientific community. Our expertise in the field of animal husbandry and veterinary knowledge of Asian elephants is renowned among the zoological, conservation and exhibition community and is shared on a regular basis with the academic community as well.

We are pleased and proud of the many roles we play in helping to preserve the future of the Asian elephant through educational exhibition, heightened public awareness and conservation.

THE CHALLENGE OF HABITAT PRESERVATION -- THE ASIAN ELEPHANT CONSERVATION ACT

In our role as both educator and preservationist, we at Feld Entertainment have begun to explore ways in which we can contribute to the long-term survival of the Asian elephant, beyond that of education and captive-propagation. Perhaps the greatest challenge facing the future survival of Asian elephants in the wild is that of habitat preservation. Unlike African elephant populations, which remain predominantly wild and insular, Asian elephants have long interacted with humans as part of the daily culture and life of the range states. The pressures of population growth, habitat diminution and demand for domesticated animals to work in the logging industry have created a human-animal conflict over land and resources. While protected areas are being established, it requires a great deal of land and financial support to maintain and establish protected habitat.

Although the plight of the African elephant has received much attention in the international community, Asian elephant populations face even greater challenges. Today Asian elephants number fewer than 50,000 -- as compared to the African elephant, whose numbers have increased steadily, by about five percent per year,³ since their listing in CITES Appendix I.

In addition, the recent agreement on resumption of limited trade in ivory as the result of the 10th biennial meeting of the Conference of the Parties at CITES is of concern to the Asian range states, since Asian elephant populations may also be at risk as a result of renewed trade in ivory. Asian elephant ivory is exclusive to the male, and even limited poaching can seriously affect gene pools and the herd's ability to reproduce.

At a recent oversight hearing on the CITES COP, Deputy Assistant Secretary of Interior for the Fish and Wildlife and Parks Department, and head of the U.S. Delegation to CITES, Donald Barry, mentioned the important role of the African Elephant Conservation Act to help

³The Wall Street Journal Interactive Edition, July 17, 1997.

African range states meet the challenge of preventing illegal trade and poaching in the wake of the recent downlisting. Given the many perils facing Asian elephants, it is clear that the time is right to support efforts to preserve this important species and its habitat with legislation specifically targeted to Asian elephants.

As a result, we have made a commitment of our corporate resources of time, energy and funding to support efforts within the international conservation community and the United States Congress to assist in the conservation of Asian elephants, including the enactment of legislation for Asian elephant conservation. We commend Congressman Jim Saxton and Congressman Neil Abercrombie for introducing H.R. 1787, and for taking a major step forward in the process of addressing the formidable challenges faced in conserving this species.

We urge the members of this distinguished Subcommittee to report this legislation before you and seek its enactment. As Doug Chadwick, noted wildlife biologist and the author of The Fate of the Elephant has said, "to pass an Asian Elephant Conservation Act would be one of the most foresighted and yet practical things we could do for the benefit of Americans, people throughout Asia, and the world we all share."



भारतीय वन्यजीव संस्थान
Wildlife Institute of India

APPEAL TO SAVE THE ASIAN ELEPHANT


The survival of viable populations of the Asian elephant (*Elephas maximus*) is very important to south-east Asians, for cultural, ecological and ethical reasons. Culturally, the Asian elephant, since its domestication around 2500 BC, has been inextricably tied to the lives of the people of its range. It has been revered in religion, used as a war machine, in forestry operations, and as a beast of burden. Therefore, it is not possible to meet people in the range of the elephant, whose lives are not influenced by the elephant in one way or other. The ecological reasons for saving the elephant are even more important. Research has shown that elephants need vast tracts of undisturbed forests to lead a peaceful existence, and many plant species require the continued presence of elephants for the dispersal and germination of their seeds, and, therefore for their long-term survival. These forests also happen to be the last of the catchment areas for many of the major rivers on which our living depends. Therefore, by protecting these forests and the elephants in them we ensure our own future. Besides providing shelter to the elephant, the survival of these forests insures the future of numerous endangered and charismatic species such as the tiger, rhino, gaur and wild buffalo.

Since the beginning of human occupation of the Asian mainland, about 30 thousand years ago, elephants have been gradually pushed out of fertile river valleys by human settlers. Desiccation of certain tracts of the habitat and large scale capture of elephants in the past, as it happened in India, have also contributed to reduction in the population and range of the elephant. More recently, the causes for decline of the elephant are poaching for meat and ivory, and fragmentation and degradation of habitat.

The elephant is a long lived and a social being like us, and needs our care both in captivity and in the wild. There is no aesthetically more pleasing spectacle than to see a large adult bull strolling across a glade with his head held high and tusks gleaming in the golden light of the setting sun. Equally pleasing is the sight of a child in the safety of its mother's arms, either mesmerized or beaming with amusement on seeing a passing decorated elephant whose arrival is preaged by the ringing of the bell.

Asian elephant conservation in the present day scenario, when problems associated with the burgeoning human population put enormous pressure on wildlife habitat, is challenging. Elephant conservation is expensive, as vast tracts of inviolate protected areas need to be established, and connected by viable corridors. Poaching needs to be stamped out and habitat degradation arrested. All these can be achieved only with the unflinching commitment of the elephant range states, sustained massive international assistance, and good-will of the conservation community the world over.

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